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Dedicated to the late Mark Goodman

For nearly two decades, the University of the Holy Land (UHL) and its subsidiary, the Center for the Study of Early Christianity (CSEC), has laboured to lay the academic foundation for the construction of a first-century Galilean village or town based upon archaeology and early Jewish and Christian sources. It was hoped that such a ‘model village’ would provide a ‘time capsule’ into which the contemporary visitor might step to encounter more effectively the rural setting of Galilean Judaism and the birthplace of early Christianity. At Nazareth Village this educational vision is currently being realized (for a popular publication on the Nazareth Village Farm project, see Kauffmann 2005).

The Nazareth Farm site discovery and survey

On a visit to Nazareth Hospital in November 1996, one of the authors of this paper (Stephen Pfann) identified an ancient winepress associated with agricultural terraces in a small valley about 500 m from the site of ancient Nazareth. This was located to the southwest, in an undeveloped sector of the hospital grounds and on adjacent land. Potsherds found on the surface of the terraces dated, in particular, from what appeared to be the Early-to-Late Roman Period. It was concluded that these terraces and the wine press were connected with the nearby original town of ancient Nazareth, located just to the east on the property of the Basilica of the Annunciation, in the heart of the modern city. The importance of this discovery was confirmed through an official archaeological survey that further advanced our understanding of the nature of the rural area directly associated with the ancient town.

A survey of the area, which covered approximately 15 acres, was subsequently commissioned by UHL/CSEC and was conducted in February 1997 by the institution’s archaeological staff, under the direction of Ross Voss. The survey revealed, along with the aforementioned winepress and
terraces, remnants of three watchtowers, two olive-crushing stones, components of an irrigation system, and evidence for stone quarrying. Surface pottery spanned a period from as early as the Early Bronze Age (third millennium BC) to the Crusader/Ayyubid period (thirteenth century AD), with the predominant forms deriving from the Early to Late Roman period. This survey confirmed the present form of the landscape to be the remnants of a complete Roman period terrace farm, various parts of which continued to be utilized for farming until modern times. Two distinct components of the farm were tentatively identified which were defined by the type of terracing found there: a ‘wet’ farm (Area B), which depended upon access to springs or reservoirs for irrigation, and a non-irrigated ‘dry’ farm (Areas A and C).

It was concluded that excavation would be necessary in order to further define the nature of the ancient farm with the hope that the excavations would illuminate previously unknown aspects of terrace farming in the Galilee. Hitherto, little research had been undertaken on terracing and ancient methods of cultivation practised in the Galilee (Golomb and Kedar 1971). The remains of the farm were considered to be the most important, since they could potentially provide a key witness to the life and livelihood of the ancient villagers. The site also appears to be the last vestiges of intact
farmland that is certain to have been farmed by inhabitants of the town of Nazareth, which lay only 500 m to the east. The initial evidence concerning the character of the site indicates that the small valley and its slopes likely comprised the property of a single extended family, which produced a variety of crops. Much of the extent of the original farm has been preserved, although most terraces on the slopes facing the hospital to the west have been displaced by modern buildings.

The Nazareth Village Farm: initial survey

The archaeological survey of the surface of the land adjacent to Nazareth Hospital was conducted in February 1997, between coordinates 1778-2338 and 1788-2350 Nazareth Map 3089/0). The summary of the results of the survey of the three distinct areas A, B and C are as follows.

Area A: a dry farm

This area is located on the western and southern slope of the hill, below the hospital. The terracing was built upon a rock slope; this was cut previously by surface quarrying that seemed intentionally undertaken in order to

Fig. 2. Areas of Excavation at the Nazareth Village Farm
provide level foundations for the terraces as well as to provide quarry-stone for farm buildings or terrace walls.

The present terraces in Area A support olive trees that were cultivated in the first half of the twentieth century. Photographs taken by the Germans in World War I show olive trees growing on the hill with a thick covering of pine trees spread in the narrow valley below. Only a few pine trees remain; the rest have been cut down or burnt. Many of the olive trees have survived the periodic summer grass fires, but others were burnt, leaving charred stumps.

The revetments of the terraces are in a poor state of preservation, due in part to the type of terrace wall that was constructed. However, this does not mean that the terraces were poorly or carelessly constructed, as the following factors indicate. Firstly, a certain effort appears to have been exerted to level the stone surface during quarrying for the building of a number of terraces. Secondly, care was taken to produce a uniform oval shape and size of the stones. This ensured a certain uniformity to the construction of the terrace wall as well as uniform spacing between the stones in order to allow proper aeration and drainage of the soil of the terrace itself. Also, the soil layers of many of the terraces seemed to be fairly well preserved, providing a virtual stepped appearance to the eroded sloped hillside (although, for the most part, lacking or hiding the remains of the revetment of each terrace).

Concerning the terrace walls which were at least partially preserved: they were built of oval limestone fragments $0.30 \times 0.20$ m and smaller. The rough surface of each stone would suggest that these were not brought from surrounding wadis (where the rocks have smoothed surfaces). This suggests
that the stones were quarried and shaped from the local limestone with impact devices (perhaps hammers and hatchets), or else were field stones. Terrace walls which are made of rough stones tend to need more maintenance than those made of cut and fitted stones (as in a ‘wet’ farm). This would indicate that the type of farm that existed here was a non-irrigated ‘dry’ farm. This type of farm relies upon watering by rain and dewfalls that are supplemented by hand watering from run-off rainwater. The rainwater was channelled into the small pools (and perhaps cisterns?) that have been identified among the terraces.

The terraces, which are in a fragmentary state of preservation, seem, at this preliminary stage of our study, to have been layered with soils of at least two consistencies (as has been noted in other terraces found in the farms around Jerusalem: Gibson and Edelstein 1985; Gibson 1995: 134–136). The overall depth of the soil over much of this area is relatively shallow. This would suggest that vines were the primary crop intended for cultivation on such terraces. However certain terraces were deep enough to raise olive trees, many of which still survive on these terraced slopes today. Crops of the dry farms in the area would typically have been olives, grapes, figs, almonds, wheat and barley.

Observable structures on the site included a winepress, a base of a watchtower, pools with channels, agricultural terraces and stone quarrying, as well as a single cylindrical crushing stone. Evidence of quarried rock surfaces appeared in various places where the surmounting layers of terrace soils had eroded away.

**Area B: an irrigated ‘wet’ farm**

Situated to the southwest contiguous to the first area, but divided by a small water-worn valley and continuing across the full length of the slope facing the first area (interrupted in part by recently constructed homes). It is a homogeneous area built with terraces of sturdy construction. The revetment walls are built from semi-dressed stones carefully fitted together and strengthened with chink stones, leaning slightly backwards into the soil of the terrace. At two places water channels could be discerned in connection with a platform with well-built stones, which was conjectured to be a ‘spring house’. One channel was connected with a cistern and the other descended to the better-built terraces below.

This type of construction normally supports what would typically be a ‘wet farm’, i.e. one that is irrigated directly from springs or pools. This allows the terrace to bear the heavier burden of water-laden soil for crops that require irrigation. Typical crops would include legumes and leafy vegetables. Most of these beautifully preserved terraces are also deep enough to allow the cultivation of larger trees. At the time of this survey, a grove of fruit-producing carob trees were cultivated on the lower terraces. This grove once continued along the southern slopes of the valleys as one can see carob trees growing...
in the ‘green’ areas between the modern building complexes. In the non-terraced valley below, there is a stand of Aleppo pine trees, remnants of a small forest of trees that once filled the uncultivated bottom of the valley.

The ruins of three watchtowers surmount the walls of three separate terraces (for the study of rural watchtowers, see Ron 1977; Dar 1986; Gibson and Edelstein 1985: 144–145). One terrace was identified as being conspicuously built of well-crafted stones with monumental characteristics. Observable structures were three watchtowers and agricultural terraces, possibly the foundation of a farmhouse, channels, a threshing floor and a tomb (all of which still need to be investigated). There was also a single cylindrical crushing stone.

**Area C: an additional part of the dry farm**

Above and to the west of Area B lay a series of dry farm terraces that originally ascended to the crest of the hill. Earlier construction of private homes, the recent construction of a road and the current construction of apartments has either covered or obliterated most of the terraces associated with this area. Three of the remaining terraces were investigated, providing information on their history. Pottery from the first to the third centuries and from the eleventh to the twelfth centuries AD was found. Local residents remember beans, lentils and carobs being harvested as recently as only a few decades ago.
The area immediately above and to the west of Areas B and C is still called in Arabic *al Kurum*, ‘the vineyards’.

**The GPS mapping survey**

The survey of the above features was undertaken by GPS mapping procedures over the course of two days in April 1997 by Mordechai Haiman (Israel Antiquities Authority) with the participation of Voss. Many of the terraces existing in Areas A and B were plotted, though not all were examined, due to the heavy vegetation. The survey registered for the first time this part of Nazareth’s ancient historical landscape of terraces and agricultural installations. Their discovery and recognition heightened the urgency for excavation in light of accelerated housing and road development currently removing or covering many of the surveyed and unsurveyed features.

In all, four successive seasons of excavation were carried out at the site between 1997 and 2000. The discoveries from this excavation and from the cleaning of the more eroded terrace areas in preparation for the construction of the Nazareth Village are the subject of the present report.

**Geological features of the Nazareth Village Farm and the Nazareth Ridge**

The geological formation that underlies the soils of the Nazareth Ridge is comprised of a relatively thin layer of semi-hard Eocene limestone forming a crust over a thick layer of Senonian chalk. In addition to this, wherever the chalk has been exposed over an extended period to temperate or wet weather conditions, the surfaces harden to a form of rock known as *nari*. Both Eocene limestone and *nari* are useful as building stones when quarried and comprise the primary building stones found in the ruins of the archaeological sites in the vicinity, namely Nazareth, Sepphoris, and Jafia.

The natural soils are calcareous in nature since they derive from the local limestone, Eocene limestone, producing a soil known as ‘Mediterranean brown forest soil’ or ‘brown rendzina’. This soil is rich and does not have the same problems of clumping common to the terra rossa soil to the south and the north, or the stony consistency of the basaltic soils to the east. This is the primary type of soil, which predominates on the rocky slopes of bedrock in valleys and potholes as a fine deep chocolate brown that whitens as it is diluted by the eroding limestone or by the rock debris from the local quarrying. The Senonian chalk produces ‘white rendzina’, a highly calcareous and relatively infertile soil that is exposed only in patches and so is hardly noticeable.

**Summary of the excavated areas**

The following is a summary of the stratigraphy and architecture of the separate excavation areas (F = feature; L = layer):
**Area A-1**

Agricultural terrace and stone quarry (F16) (Figs. 5 and 6; for the pottery finds, see Fig. 37:2–7). A section of the agricultural surfaces and wall surfaces of this extended terrace was cleaned. A metre-wide trench was cut from the back of the terrace to the terrace wall. Four of five of the original layers of the soil remained preserved. There is evidence that the terrace walls underwent partial collapse and rebuilding more than once during the period of use.

Layers (counting from bottom up from the bedrock/quarry surface): Layer 1: crushed Senonian chalk (Munsell Chart reading: very pale brown: 10YR 8/3); Layer 2: Mediterranean brown forest soil (dark brown: 7.5 YR 3/2; with 10% small to medium limestone grains); Layer 3: crushed Eocene limestone debris (white: 10YR 9/1 [off chart]); Layer 4: Mediterranean brown forest soil (brown: 7.5 YR 4/3; with 10% small to coarse grains); Layer 4a: mixed recent soil and debris.

What appeared to be a limestone tile was found in the course of excavating the trench and was left projecting from the western baulk in the lower dark layer (L2), which contained potsherds typical of the Early Roman Period (cf. Fig. 5). The character of the stone matched that of the local nari or Eocene limestone which is also typical of the upper exposed surfaces of the Nazareth Ridge rock formation. The tile was approximately 3.2 cm thick. After extraction it became clear that the tile had two side edges that were smooth and well cut at a right angle, while the remaining sides were unworked and rough. The upper and lower surfaces were levelled but unsmoothed. The tile was evidently a rejected remnant cut from an actual tile intended for use. Another tile remnant of similar form and dimensions was found during the excavations in Area A-3.

Below the soil layers of the terrace lay a rock surface that was evidently quarried not only to provide stone for the stone masons but also in order to provide an elongated horizontal, semi-level surface as a base for agricultural
terraces. This practice vastly extends the potential surface area fit for agricul-
tural terraces on any rock slope. At the bottom of the trench towards its northern end was found the rim of a Kfar Hananiah Type 3B casserole dating to the Early Roman Period (circa first century AD; Fig. 37:3). The date matches the date and character of the other potsherds in the lower layers of this terrace.

Evidence for the extended quarrying of this general area can be found in the surrounding rock surfaces. There one finds the typical squared blocks with cut separation channels for ashlar removal. The quarrying was deliberately carried out in such a way as to leave a horizontal floor for the base of the agricultural terrace. (Surface quarrying such as this would normally be done parallel to the diagonal surface of the rock, not horizontally.) Rock debris and rejected chips were also found as evidence of the quarrying process.

At the same level, at the northern extreme of the terrace and below the escarpment which ascends to the next level above, was a low rectangular raised stone platform (0.1 × 1.6 × 3.5 m) with a carved post-hole at its corner (inside of which hatch marks were visible). This likely provided a shaded work area for the stone masons and subsequently for farm workers. A 1 m squared rock depression immediately to the west was excavated.
While cleaning this uneven rock surface, a horizontal handle of a crater (?) dating to the Late Hellenistic or Roman Period (Fig. 37:2) was found. The stone terrace wall was preserved in places nearly up to its full height. However in certain places, including the portion that was cut by our trench, there was evidence of rebuilding of the terrace wall and part of the terrace behind it. It is here that the pottery, including one piece of early Ottoman porcelain, was found.

Adjacent to the excavated area, to the east, was a large raised stone platform that projects 2 m from the terrace above into the terrace below. This likely formed the base of a watchtower whose stone and soil superstructure is now missing. The tower would have provided an overview and protection for the crops on the terraces of the immediate area.

**Area A-2**

A wine press was uncovered in this area (F27) (Fig. 7, 8 and 9; pottery Fig. 38). The main pressing floor (floor 1) was well-cut, square (2.5 × 2.5 m), and levelled into the surface of the Eocene limestone. The floor is accompanied, to the south, by a collecting vat with a sump. The smooth, somewhat bleached surface is not at all preserved in the middle of the floor. This may be due to a secondary use of the floor as a channel for rainwater or as a crushing surface for olives (note the crushing stone below), as well as the natural erosion of the rock surface.

A second adjacent floor (floor 2) was located immediately to the east (2.5 × 2.2 m). The surface is badly eroded, making the original dimensions and use of the floor difficult to establish. Although there is a rough depression below and to the southeast of this floor (which could have been used as a collecting vat), the rock surfaces are natural and unworked. Floor 2 may have been used as a gathering point for grapes that were about to be pressed in floor 1. Alternatively, floor 2 may also have been used as a second pressing floor when floor 1 (or its collecting/fermentation vat) was occupied. Rough-hewn presses (as well as those using natural depressions) are not uncommon in ancient terrace farms (Frankel 1984; Gibson 1995: 90).

The presses are difficult to date since the accumulation of soil and datable material (e.g., pottery) which was excavated from them represents material which was deposited there after the presses went out of use (likely terrace erosion from terrace F26 above, see infra). No mosaic floor or even tessarai (mosaic tiles) were found which would commonly be associated with Late Roman to Byzantine wine press floors. Modern debris was found on the surface. Late Hellenistic to Islamic pottery was collected with the usual predominance of Early and Late Roman pottery (Fig. 38:1–6). In the lower part of the accumulation near the rock surfaces, many potsherds with the typical ribbing of the Early to Late Roman Period were found (which are typical of the fill found within the terraces on the hill above the presses).
Fig. 7. Wine press plan and section: 1: pressing floor; 2: holding area; 3: collecting vat; 4: sump

Fig. 8. Pressing drum from below Area A-2
During a later period (post-Roman) the press was no longer used for wine production. It may have served as the floor of an olive press during other periods, taking into account the damage in the middle of the pressing floor. One cannot rule out the possibility that the floor was utilized in the off season for this purpose while the wine press was still in use. Still later, the pressing floor, along with the vat and other rock depressions, were utilized to gather rainwater to supplement rain and dew fall on the farm or to water thirsty animals. Small channels were cut into the rock surfaces to gather runoff into the pools.

A number of shallow horizontal recesses are in the immediate vicinity of the press to the north and to the west. Twelve metres to the west a natural cave (2.2 m x 2.5 m x 40 m) containing the bones of a small carnivore.

About 30 m to the south and below the press, on the surface of the ground, one of two crushing stones was found. It comprised a cylindrical drum with the ends rounded off (cf. Fig. 8). The practice of using rolling stones for crushing grapes and olives extends back into antiquity, and was still widespread in the early twentieth century (cf. Fig. 9) (Dalman 1928–42: IV, 183, Pl. 47; Frankel et al. 1994: 97–98).

**Area A-3**

An elliptical terrace (F10a) (Figs. 10 and 11; pottery Fig. 39). The vestiges of this U-shaped terrace can be traced about 25 m along the hillside. The eroded
The face of its terrace wall (F10a) was cleaned. The $0.20 \times 0.20$ to $0.30 \times 0.30$ m sized, nari lower stones of the stone retaining wall were preserved in some places. A more recent row of similar sized stones was found parallel to and above and slightly inside what would have been the original top of the stone terrace wall. It was decided that this line of stones was not part of the original wall since there were no stones below it but only the earthen embankment of the original wall (made of earth and $0.05 \times 0.05$ to $0.20 \times 0.30$ m
stones). Evidently, at some point in history the collapsed terrace face was not rebuilt. Rather, only a line of stones from the collapse was set into the top of the embankment in order to protect the layers of agricultural soil from washing away during the yearly rains. (This practice was applied to other terraces at this farm but none so well defined as here (cf. Gibson 1995). No trench was cut to investigate the stratigraphic layers of this terrace. Potsherds were collected during the cleaning of the terrace face, confirming the predominance of Early and Late Roman pottery in this area (Fig. 39:1–3).

At about mid-point, the remains of steps (F10b) leading from the terrace below were cleared; only a portion (one squared stone) of the lowest step remained. However, the remains of the eastern sidewall of the staircase were preserved by several well cut and fitted stones (cf. Fig. 11).

**Area A**

Terraces and stone quarries were investigated in this area (Figs. 12–18; pottery Fig. 37:1).

During the 1997 and 1998 excavations the overall form of the local ‘wet’ and ‘dry’ farm and its history was determined. A typology of terrace form and construction was also established, relative to both the internal and external structure of terraces.
Excavations in 1999 and 2000 were conducted exclusively in Area A, the hill on which the Nazareth Hospital is situated. Since the primary focus in 1999 and 2000 was the restoration of the agricultural terrace system revealed in 1997 and 1998, all efforts were directed toward excavation of at least part of each remaining agricultural terrace that was undergoing restoration or consolidation. The first step in this process was to excavate the stone and earth which had spilled out of partially collapsed terrace walls. Removal of this collapse enabled us to trace the actual extent of a particular terrace and assist in its eventual restoration. In most places the upper courses of the terrace-facing wall had collapsed, leaving a deposit of cobble-sized stones and eroded agricultural soil banked against the remaining face of the lower courses of intact terrace wall. This embankment served to hold the rest of the terrace wall in place and helped to prevent further erosion as long as the bedrock beneath was not too steep.

In certain terraces, the earthen embankment is difficult to discern since the contents of the structure, lacking the additional crushed lime and pebble/cobble mix of other terraces, did not differ significantly from the agricultural layers in consistency. In such cases, at some point in the history of the terrace, both the revetment and embankment collapsed, leaving the terrace builder to rebuild the revetment wall afresh, but this time directly
against the exposed remains of the agricultural layers, causing the line of the terrace wall to recede.

At certain farms of the Early Roman Period, and especially later during the Byzantine Period, the stones that were used for the terrace retaining walls were hard and heavy enough to be crafted with flatter upper and lower surfaces so as to allow for the creation of a free-standing stone retaining wall. The strength of these walls allowed for the importation of soils during a terrace’s construction without risking the collapse of the wall. On the other hand, the stones of the terraces at Nazareth are derived from the local *nari* and chalk, which is more friable, and are crafted with rounded surfaces. This does not allow for the creation of a sufficiently stable, free-standing wall that could withstand on its own the task of importing and layering the agricultural soil layers and then continue to fulfil its function to retain the heavy soil layers. Even the significant terrace wall of the wet farm F7 in Area B-2, with its larger, relatively well-crafted stones, was likewise built as an ensemble, with its revetment leaning against an embankment for support (see below).

If the area was subject to significant water infiltration, large stretches of the face of the terrace often collapsed. Despite this problem, the soils behind the collapsed terrace wall usually remained intact because the triangular shape of the cobbles and pebbles which backed the terrace served as an effective
embankment to hold the farm soil in place (see the section drawing of terraces in Gibson 2001: 114, Fig. 4.1). Even though these spills excavated from the front of the terraces were of an eroded nature, the ceramics recovered from them provide a relative *terminus post quem* date picture of the periods in which the land was cultivated (on the methods of dating terraces, see Gibson 1995: 160–164).

To facilitate the description of the terrace system in Area A, each major horizontal terrace step or line of terraces was assigned a number. For example, step number 1 begins at the top at the northwest end of the hill and extends east at more or less the same elevation. Each descending step follows the next consecutive number, with numbered sub-divisions which cover individual terrace segments (see Appendix 1). These and the quarry features along them are approximately 30 m in length, extending in an easterly direction. Each terrace wall, quarry, or other feature was given its
own feature number and is referenced therefore to the step and sub-division of its particular area.

The farm, the valley and its terraces

A close examination of the hill where the present terraces are located indicated that less than half the number of terraces that once covered the hill in antiquity are still in place. Approximately 35 major lines of terrace walls or formations are currently extant. These terraces are spaced 4 to 5 m apart from one another in serried fashion down the slope of the hill. The excavation revealed foundation lines in the bedrock where other terrace retaining walls had once existed but are now completely eroded away. These missing terraces indicate that in antiquity there were perhaps double the number of terraces that exist at present.

The ancient terrace system consisted of many more steps of narrower plots of land separated from each other by approximately 2 m intervals. The long, relatively narrow, and multilayered upper terraces would have been best suited for viticulture, as the rock-hewn wine press at the bottom of the hill suggests. Lower elliptical terraces could be utilized for growing trees such as the olive, which would have been planted in locations where the roots could grow deeper (cf. Fig. 33).

Most of the terraces reveal several stages of repair or complete rebuilding easily discernible by the variations of stone patching and the incorporation of modern building materials in some of them. Many older terraces are still in place but buried under earth eroded down the slope. These ancient terraces still retain their original farm soils. They have generally survived because the
walls were securely anchored on levelled bedrock, especially in areas of ancient quarry cuttings. In a number of instances there is evidence that stop-gap measures were taken to impede the erosion of the inner agricultural soils of the terrace. When the revetment and embankment had deteriorated it was common practice to place a line of $0.20 \times 0.20$ to $0.30 \times 0.30$ m sized stones at the forward edge of the terrace to keep back the soils (see Gibson 2001: 114, Fig. 4.1).
The stone quarries

Both Eocene limestone and nari are useful as building stones when quarried and comprise the primary building stones that are found in the ruins of archaeological sites in the vicinity, including Sepphoris and Jafia. Since the Senonian chalk lies only 1 to 2 m below the surface of the bedrock in most places, the semi-hard limestone must be cut from the rock slopes riding just above the chalk layer by a method that might be best expressed as ‘surface quarrying’ or as an ancient form of ‘strip quarrying’, forming pits across the rounded slopes like dimples in a golf ball. The cuts are normally squared and fairly uniform to produce stones approximately 0.60 × 0.40 × 0.30 m (cf. especially the quarries, blocks and tiles of Areas A-1, A-3, C-1 supra and Steps 3A-1).

Numerous quarries were cut into the rock face. More than half of the hill exhibits quarry activity, which demonstrates quite well that the hill was bare of soil prior to its conversion to stepped terrace farmland. The quarry activity was abruptly interrupted when the decision was made to convert the land to terrace agriculture. This is seen by the number of partially hewn ashlar blocks left in situ but now covered by soil or terraces. The pristine condition of the stone blocks and ashlar negatives at the base of the quarries is another indication that the quarries were soon covered over and not left exposed to the weather. After the terrace retaining walls were constructed,

Fig. 18. Step 7-3: Remains of ancient revetment wall and agricultural soils
the soil had to be brought up the steep slope in baskets on the backs of donkeys (on the local transportation of fills for terraces, see Gibson 2001: 114, and references there). There are indications that the quarrymen anticipated the conversion of the hill to terrace agriculture by the way in which extraction of some of the ashlar blocks left narrow strips of levelled bedrock onto which the terrace walls were constructed. Also in the larger quarries inset deeper into the hill, limestone chips and chalk debris left over from the stone extraction were reserved and used as bedding fill under the agricultural soils.

The quarry stones were cut using chisels and adzes. Chisels were placed in a hole with wooden wedges to break blocks of stone away. A water-logged wood technique would not have been feasible in such a climate.

**Area A: finds made during the construction of the Nazareth Village**

Various finds were made during the construction of the Nazareth Village Project in 2000–2002 and were recorded by Mark Goodman. These comprise a number of unstratified finds including a coin and pottery vessel fragments from Area A (Figs. 19 and 20).

![Coin of Tiberius II (578–82 CE)](fig19)

The following coin was a surface find in Area A:

12 nummi of Tiberius II (AD 578–582), minted in Alexandria.  
Wt.: 1.96 gm; diam.: 14 mm.  
Obv: Bust of Tiberias II draped r. with cross on diadem  
Rev.: I B with *CHI RHO* (staurogram) between, on two steps:  
Below in ex.: ALEX; which reads: ALEXANDRIA

This represents the latest Byzantine coin that has been found in the Nazareth area.

From Bagatti’s excavations in Nazareth 4 coins were found, all Byzantine (mid-fourth to early fifth century) and 2 coins from the vicinity: one Late Roman (the earliest coin, mid-third century) and one Byzantine (late fifth to early sixth century). These were recorded as follows: Grotto No. 25: 3 unidentifiable Byzantine (one with head of Emperor; two very small,
typical of late fourth to early fifth century AD) (Bagatti 1969: I: 46). Grotto No. 29 (embedded in the plaster): one with head of Emperor, apparently Constans (AD 337–350) (Bagatti 1969: I, 210, Fig. 172). In addition there were finds from the village: one coin of Anastasius (AD 491–518) (Bagatti 1969: I, 234). Surface find from ploughing the land around the village: one coin of Gordian III (AD 238–244) (Bagatti 1969: I, 251). More than 60 other coins from the Islamic to Mamluk Period were unearthed in the 1955 excavations (Bagatti 1969: II, 194–201). In addition, 165 coins were uncovered by Yardenna Alexandre in the 1997–1998 excavations at Mary’s Well, Nazareth. The coins were overwhelmingly Mamluk, but also included a few Hellenistic, Hasmonean, Early Roman, Byzantine, Umayyad and Crusader coins (Alexandre, forthcoming).

The unstratified pottery vessels included a complete Gaza Ware bowl (Fig. 20), which was found during the clearance operations which preceded the construction of the Nazareth Village. Data: Diameter: 26 cm. Height: 7 cm. An Early Bronze III platter fragment (Figs. 20, 39) was found along the path. There have been a number of non-diagnostic potsherds that were suspected to have been from the Early Bronze Age, based upon clay consistency and manufacture. This, however, is the first truly identifiable form to come from that period. According to the late Douglas Esse (1991: 45, 76–83), writing about the Southern Galilee area, this form of platter with net burnishing is typical of the Early Bronze III and is distinct from those of the Early Bronze II (as is also the case with the Khirbet Kerak Ware with string cut bases on bowls). The indentation on the underside of the vessel, below the rim, is typical of platters relatively late in the Early Bronze III (see also Braun 1996). In addition, the upper stone of a push grinder (partial) was found in the fill. To date this is the only push grinder to be published from the Nazareth area.

Area B-1 and B-2

The lower half of a large hill bordered by a spring-fed wadi on its north and east sides, Area B-1 and B-2 is now covered by a modern road
construction which arcs around and separates the higher reaches of the west side of the hill. For the purposes of the survey the lower half of this hill has been designated Area B. The southern border of Area B is defined by a housing development and a saddle in the topography to the southwest of the same hill which rises to another set of terraced slopes designated Area C.
The natural topography of the hill consists of a series of broad arcing limestone plates. These plates widen at the lower elevations as one approaches the wadi. In Area B, the edges of four broad plates are crowned by large, strongly built terraces which are their most conspicuous feature. Smaller subsidiary terraces are spaced at intervals of approximately 5m. The lowest major terrace, F1, has lost most of its farm soil but the line of the terrace is still intact. The next terrace rise to the west, F2, has an attached watchtower (F3). The next line of terraces, F4 and F5, begins approximately 5m west of F2. These terraces bond to watchtower F6. Both terraces retain a substantial amount of farm soil, as yet unexcavated. The biggest terrace, F7, supports the largest field. This terrace extends from the wadi channel running in a southwesterly direction for approximately 36m before it abuts terrace F8. The field supported by this terrace is 25m wide and 45m long. F8 extends 12m from the south end of F7 and is situated approximately 5m west of tower F6 at an elevation 1.5m above tower F6 and its associated terraces.

Terrace F5 continues south for 20m where it abuts the semi-circular buttress F17 supporting the east face of watchtower F16. Five metres west of F5 terrace wall, F25 extends south approximately 25m before abutting the north face of watchtower F16. Each terrace currently retains farm soil layers. The last great terrace associated with watchtower F16 is terrace F26. This terrace bonds to the northwest end of the watchtower and then extends north for more than 35m. Part of this terrace has been disturbed by a subsidiary access road associated with a new housing development which has carved away the higher slope of the hill. The farm soil behind the terrace is now covered by this hopefully temporary road.

The northern and western limit of Area B (B-1) has been delimited by the scree of limestone boulders and cobbles spilling from the new road winding down through the wadi. This road has severed the connection of the ancient spring and the wadi channel, and has covered the north end of the terrace system which fronts the wadi. Four terrace walls (F10, 11, 12, and 13) enclose an area approximately 30m long by 9m wide. A cistern (F19) and channel (F14) were visible under the heavy plant cover fronting the east side of this exposed limestone plate. The sharp 3m drop in elevation

Fig. 22. Main terrace wall F11 of Area B-1 likely contemporary with the terrace rebuilds.
Fig. 23. Plan of Area B-1
from the edge of this plate to a rock-hewn enclosure (F23) adjacent to the wadi but separated by a 1 m thick barrier of bedrock is suggestive of a spring house.

Area B-1

Excavation

Excavation in Area B-1 involved the removal of a heavy layer of plant overgrowth covering a variety of features associated with ‘wet’ farm terrace agriculture (Figs. 21, 22 and 23; pottery Fig. 40). The plate on which these features were preserved was 35 m long and 13 m wide. The northern end of this plate – now covered by a scree of limestone boulders and cobbles cut out of the higher slopes for a road – was originally bordered by a spring-fed wadi channel. The eastern face of this plate ends in a sharp vertical drop, apparently the result of major quarrying. The northeastern exposure drops more than 3 m. This area is partially enclosed. A line of bedrock separates this deep exposure from the wadi bed 1.5 m away. A terrace wall (F15) rests on top of this bedrock border and fronts the wadi channel. This semi-enclosed ‘basin’ (= F23) is approximately 6 m wide. Its overall dimensions are unknown due to the soil which has washed in and filled it. Water had evidently flowed from a rock-cut channel (F21) following a defile in the rock which spilled into the catch basin (F23). Whether this installation is a spring house or just an abandoned quarry remains to be determined. A 2 x 2 m probe along its northwest face (L3) exposed a layer of softer chalk underlying the harder limestone. More than a metre of chalk had been quarried out, but where the cutting stopped the surface was left rough, showing no sign of preparation for holding water. A much larger exposure will be necessary to determine if there was an opening hewn into the rock through the chalk, and to see if the bottom of the quarry was plastered in any way to collect or store water. L3 consisted of colluvium with numerous ashlars. These were sitting in brown soil, all of which had washed down off from terrace walls F11 and F12 at the end of the terrace plate. Modern pottery (Bas No. 3), including bathroom tile fragments, roof tile fragments, and a Gaza water jar rim fragment, were predominant. Several sherds of Roman Period pottery were also recovered including a handle and two body sherds. A large bone, probably the leg of a cow or ox, is notable.

The eastern terrace walls

Three distinct terrace walls crown the south and eastern edge of the bedrock plate. From south to north these are F10, F11, and F12. All three were built of a combination of ashlar stones lining the inner and outer faces
of the walls with a rubble core of chalk stone cobbles and pebbles. These walls, which average 1 m in thickness, are secondary terrace constructions, not original to the modification of the bedrock plate and channel system on which they currently sit. All of the ashlar stones making up these terraces are in secondary use. Many of the stones represent voussoirs, ashlers which were part of vaulted arches now robbed from some earlier architectural unit, the location of which has not been discovered. The bulk of the ashlers making up the outside face of these three terraces were taken from walls. The average size of these ashlers is \(0.30 \times 0.30 \times 0.25\) m, while the average size of the voussoirs is \(0.20 \times 0.30 \times 0.25\) m. Another clue as to the secondary nature of this terrace construction is the fact that each wall either sits in a rock-cut channel or blocks the outlets from these channels. For example, three separate outlets from channel F14 are blocked by ashlers (= F27) along the east side of the channel. F11 actually has its foundation course along its southern end resting in a rock-hewn channel. This provided a secure footing for the terrace but ended the channel’s use as a conductor of water. Another channel (F14) was modified so that all water was conducted into cistern F19. At least three original openings through the bedrock leading east off this channel were plugged with ashlers (F27). These three plug walls reused voussoirs to shut off the flow of water, presumably to the next lower terrace plate. The northernmost plug of F27 which is adjacent to terrace wall F12 also cut off the flow of water in channel F22 from reaching channel F14. Terrace wall F12 also blocked the flow of water running through capstoned channel F21, which may have been heading towards a spillway down to F23. Finally, terrace F10 surrounds the south and east side of cistern F19 and shuts off any outlet to the lower terrace field from this end.

Erosion of these terrace walls has exposed much of the rubble fill which had spilled out and covered the face of these walls, preserving the remaining lowest courses. A portion of the core of terrace wall F11 was excavated in an effort to expose its inner face and its relationship to channel F14 and plug walls F27. Several jar rim fragments and a yellow glazed bowl rim fragment are apparently of Crusader-Ayyubid date. If this dating of the terraces holds up, their construction would have occurred in the twelfth or thirteenth centuries. Since all of the original farm soil supported by these terraces has eroded off, there is no other independent way of dating their use except by excavating the make-up of the walls themselves. Dating the original hewing of the channels is even more problematic.

**The western terrace walls**

The western side of the exposed bedrock plate was bordered by a heavily eroded terrace wall (F13). This terrace retained a higher step of farm soil on the wall’s better preserved western side. This terrace also bordered and
kept this soil from choking a rock-hewn channel (F18). The few sherds of pottery recovered from L2 (Bas No. 6) all date to the Roman Period, except for one fragment of a modern roof tile. The southern end of terrace F13 is abutted on its east face by terrace wall F10. F13 stops at the point where the bedrock plate drops off and intersects another exposed plate of chalkstone bedrock. Another terrace wall (F9) begins just at the junction of the bedrock plates; it barely touches the western side of F13 at its south end. The bedrock on which F9 was built dives below the soil approximately 20 m south of where the wall begins. Where the bedrock is visible, a channel (F28) can be seen into which terrace F9 was set. As with the other channels that had carried water from a nearby spring, channel F28’s use for ‘wet’ farm irrigation was cancelled by the construction of a later terrace. A temporary access road for a housing complex higher up the hill has damaged some of terrace wall F9, causing its partial collapse. This road has also covered the farm soil retained by the terrace with a scree of chalk boulders and cobbles. Neither the terrace nor the farm soil behind it has been excavated. These two western terraces differ from the eastern terraces in Area B-1 in that they are constructed out of smaller and softer chalkstones. The stones are semi-dressed, but no true ashlar appears to have been used in the courses that are currently visible. Whether this has any chronological significance remains to be seen.

**The irrigation system**

The channels alluded to above in relation to the terrace wall rebuilds were each hewn out of hard limestone and chalk layers. The largest and longest channel F14 (c. 25 + metres) received, and/or diverted, water from three other channels (F20, F21 and F22). In its last stage of use F14 carried water to a rock-hewn cistern (F19). This cistern – which has not been excavated – had been re-plastered and mortared with modern cement. It does not seem likely that all of the effort put into the construction of these channels was done just to supply this one modest cistern. The plug walls F27 served to keep the water flowing south to the point where it ends at the mouth of this cistern. Excavation of the cistern will be necessary to see if it was contemporary with the terrace rebuilds, as appears likely. The most important evidence for ‘wet’ farm irrigation is seen along channel F18. This channel, which is hewn out of chalk, contains a series of eight outlets or valves for releasing water. These were cut through the eastern border of the channel with each valve spaced approximately 0.80 m apart. Each valve is 12 cm wide and 0.5 m long. The upper four valves were hewn out of hard limestone and the lower four in chalk. The bedrock, which had been covered by soil, would have supported the water and the soil itself, which would have conserved the water by shielding the moisture from evaporation.
Area B-2

Excavation

Terraces, a channel and watchtowers were investigated descending eastward down the slope, as well as extensive slope terracing immediately below and to the east of B-1 (Fig. 21, 24; pottery Fig. 41). Several places in the high revetment of this terrace, the highest and most impressive of the entire farm, were repaired at various points in antiquity. Cleaning in the partially collapsed southeast corner of the terrace exposed some potsherds from the Byzantine era. This indicates that this particular terrace of the ‘wet’ farm had been utilized as late as that period since it had been repaired then. Also it indicates (taking into account the line of the Roman Period channel which descends from Area B-1 along the terrace’s southern edge) that this ‘wet’ farm terrace was likely preserved to its present dimensions throughout its history.

South-east terrace and tower

At the end of the channel descending southeast from Area B-1 was the remains of a terrace that has recently been used as a modern access road. This terrace is likely the lowest element of the Area-C dry farm since the water channel is actually cut into the escarpment that the terrace wall surmounted.

Fig. 24. Section of Wet Farm terrace wall F-7
Additional work in Area B-2

In 1997 excavation was concentrated in Area B-1 (Fig. 21; pottery Fig. 41). Here a complex system of rock-hewn channels for ‘wet’ farm irrigation was exposed. The principal goal of the first season was to obtain a comprehensive plan of the terrace system and the irrigation channels detected in Area B-1. Unfortunately, most of the farm soils in this area had eroded off the bedrock plate, so it was not possible to date the creation of the system or investigate the type of farm soils once supported by the terrace walls except by probes into portions of the rubble fill making up the wall. To overcome these deficiencies in our data, excavations in 1998 were focused further east on the terrace steps below Area B-1. The broader limestone plates of Area B-2 contain large field plots and deep soil deposits. This area also has the best-preserved terrace walls, several of which stand to their original height. Wet farm agricultural features undoubtedly exist in Area B-2 but no irrigation channels have been exposed because the soils behind the terrace walls still hide the channels. The intact soil deposits in this area contained sufficient amounts of pottery from which to date the stages of cultivation of the land. The well-stratified soil deposits in Area B-2 have enabled us to follow the method of soil preparation and a sequence of utilization of the land. Four trenches were opened in this area. The largest probe was opened above watchtower F6, where we wanted to trace the superstructure of the tower in anticipation of its restoration. Additional stretches of terrace walls not fully seen in 1997 were exposed and several new terrace walls were discovered (F33, F36 and F37) in 1998. We now have plans that provide a full picture of the extent of the agricultural plots farmed in the area. In addition, walls representing the base of two watchtowers (F3 and F6) were exposed in the course of the excavation.

Area (B-2) terraces

The longest terrace (F1) in Area B was exposed over its entire length of 80 m. This terrace fronts the spring-fed wadi channel that runs parallel with the wall and the bedrock. Limestone cobbles make up the face and body of the terrace (0.15 × 0.15 m) but these stones exhibit very little tooling. A new terrace wall (F37) was discovered running at a right angle from the base of terrace F1, which projects 4 m towards the channel of the spring. Both terraces rest directly on the bedrock plate, with terrace F1 skirting the edge of the plate itself.

Terrace F7 sits recessed 0.5 m back from the exposed and quarried face of the limestone plate. This plate represents the northeastern limit of Area B-2. It was completely exposed and is 45 m long. The northern half of the terrace sits directly on bedrock, while the southern half was founded partially on Eocene limestone derived Mediterranean brown forest (MBF) soil (‘brown
rendzina’ soil) but also on the remains of a collapsed terrace wall (F/L40). This earlier collapsed wall now serves as an embankment that continues to retain the original soil it supported, as well as serving as the foundation for this portion of F7. Several stages of patchwork and repairs to this terrace are visible. The final episode of repair consisted of a double course of flat limestone slabs that caps earlier patchworks of cobbles and boulders. The last 5 m at the north end of this terrace was built of fine ashlars (c. 0.40 × 0.45 m). The last ashlar of just one course abuts the inside line of terrace wall F1. Erosion has carried away the higher courses at the end of the wall but three other courses of ashlars remain to the south. None of the soil layers retained by this terrace have yet been excavated; however, pottery recovered from one small cobble patchwork collapse (L39) contained Black Gaza Ware. Three major breaches of terrace F7 were repaired by Mark Goodman and his team of restorers in October 1998. The gaps left by these breaches provided the opportunity to photograph the soil profiles retained by this terrace and to see the method by which the terrace was constructed. Behind those portions of the terrace whose face had been patched with small cobbles, much larger stones of semi-dressed ashlars were employed as plugs to hold back the soil layers and relieve pressure from the face of the terrace itself. The revetment wall (F7) leans back into the terrace and the bedrock that the wall sits on is recessed 50 cm from the edge of the plate since the bedrock slopes sharply; however, the foundation of the terrace appears rather vulnerable to slippage. Under these conditions the cobble fill of chalkstone that in profile is triangular in form is the crucial factor in supporting both the terrace face and the soils behind it. The cobbles filter and allow water to pass through the terrace. In addition, they bear the weight of the protective revetment and receive the pressure exerted by the soil layers behind it.

The southern end of terrace F7 abuts the northern end and face of terrace wall F47. Terrace F47 is approximately 15 m long and one to three courses high. The northern half of the terrace was set directly on MBF soil and the southern half of the wall with just one surviving course sits directly on the exposed bedrock. At this juncture the rest of the wall has eroded away; it likely had continued south to meet the north face of watchtower F16. The stones of this terrace include semi-dressed boulder-size stones and cobbles. No soils supported by this terrace have yet been excavated.

A 1 × 4.5 m trench was excavated immediately behind terrace wall F2. This 15 m long terrace supports a triangular plot of land (L34) that extends behind and north of watchtower F3. A homogeneous fill of poured agricultural soil was revealed. The MBF soil consists of compact granular earth with numerous inclusions of limestone pebbles and chips. These inclusions are at their heaviest concentration just above the surface of the limestone plate (F48). Many of these chips are the result of sheering or peeling of the bedrock from water retention and temperature variations. The soil is at
its deepest (0.60 m) immediately behind terrace wall F2. The soil thins as it extends west on the rising bedrock (F48) just at the point where it reaches the next terrace (F4). The soil is retained by a terrace wall (F2) that consists of four courses of boulder and cobble-size limestone cemented in place with mud mortar and chink stones. Behind this one-row wide fronting of stones there is a triangular-shaped pile of loose limestone pebbles, cobbles and brown granular earth. The quantity of pottery present in this soil layer is light. Of the 206 pottery sherds collected, most are tiny ribbed, thin-walled body fragments. These, along with the more diagnostic rim and handle fragments, are Early Roman in date with one fragment of a Gaza Ware cooking pot (cf. drawing) and one late medieval sherd.

The largest probe opened is a 2 × 8 m trench west of terrace wall F32, east of terrace F33, and north of watchtower F6. This trench enabled us to probe below the stone revetment (F35) that skirts the rectangular platform of watchtower F6. This revetment also supports the front face and lower courses of terrace wall F33. A layer of terrace collapse (L30) partially covered this revetment and the farm soil spreading east from the terrace (F33). In this collapse, pottery was predominantly Early Roman, but a few sherds of Black Gaza Ware were present. This layer of collapse (L30) and the revetment (F35) sealed a deposit of agricultural soil (L31). This layer consisted of compact MBF soil which is almost devoid of cobbles, but does contain some very small pebbles. The pottery includes 397 recorded pieces, consisting of some Early Roman, but predominantly Late Roman to early Byzantine sherds (including the Byzantine cooking pot in Fig. 41:2 and a few pieces of Beth Shean jars). The soil was retained by terrace wall F32. This rather thick deposit (1.12 m) of soil covered an area of quarried stone (F49).

The bedrock beneath (L35) was quarried and the remains of partially hewn blocks were still attached to the rock bed after considerable effort had been made in preparation for their removal. This, along with numerous other instances of abruptly abandoned quarry cuttings with almost finished blocks left in situ, has yet to be explained. For the most part the quarry cuttings are oriented differently than the terrace walls which cover them. This widespread quarrying followed a logic dictated by the nature of the rock being worked and the purposes to which the stone was put. With the creation of the terrace system, the dictates of the topography and the type of cultivation practised were ordered by different contingencies. The levelling of the rock scarp through major quarrying undoubtedly aided the conversion of the land to stepped agricultural terraces. Quarrying helped define the space of some of the farm plots, but this does not seem to have necessarily been done in conjunction with the conversion to agricultural use. Perhaps the work in the quarries was superseded by the need for agricultural production to supply the growing village of Nazareth. Future investigations must focus
on the nature of the quarrying activities and the date in which they were in operation.

Over 14 m of terrace F32 have been traced. The north end of the terrace meets the southwestern end of watchtower F3. A gully has eroded away most of the stones at this juncture and the wall exhibits several episodes of repairs with small cobble patches. A narrow strip (ca. 2 x 0.50 m) of this collapse and erosion debris (L45) was excavated along the face of the wall. This layer consisted of decayed organic matter with small cobbles and pebbles that extend to the bedrock on which the terrace was founded. The few sherds of pottery recovered included one Gaza Ware jar fragment and four Roman body sherds.

North of watchtower F3 and 2 m east of terrace F2, the poorly preserved remains of terrace F38 were traced for 7 m. This terrace rests on a bedrock ledge which drops 0.5 m to the next lower step fronted by terrace F1.

A 1 x 2 m probe behind terrace F5 was opened in an effort to define the relationship between this terrace and watchtower F6. The southern extension of this terrace was founded on MBF soil. The north end of the terrace rests directly on the bedrock and it also extends over the perimeter of the tower and rests partially over the remains of an earlier terrace (F46). The layer of MBF soil (L44) behind F5 was cut by a foundation trench (F50). This trench was associated with the construction of terrace wall F5. No pottery was found in the backfill of the trench. The pottery from L44 was almost exclusively Early Roman with potential dates ranging from the first century BC to the third century AD.

Area B-2: Watchtowers

*Northern watchtower (F3)* (Fig. 21)

The perimeter walls of the northern watchtower (F3) were partially cleared of the collapse of its higher courses. In particular, the north face and corners of the structure have suffered the greatest amount of erosion. These gaps along the sides and corners have made it difficult to obtain a precise plan. As presently preserved the structure measures 8 x 7 m. It is roughly square and built of partially tooled limestone boulders and cobbles. Like the better preserved tower F16, explored in 1997, F3 also appears to have had a stone revetment or apron of stone protecting the sides of the tower and holding it in place against the steeply sloping bedrock. Most of this apron has eroded away but when in place it would have measured approximately 12 m in diameter at the base of the structure. The walls of the tower are sloped to counter the effects of the slope on which the tower rests. Limestone chips serve as chinks holding the courses in place. As seen through the gaps of the missing masonry a fill of chalkstone pebbles and cobbles makes up the core of the structure.
Central watchtower (F6 and F35) (Figs. 21, 25; pottery Fig. 41)

Watchtower F6 was cleared of collapse and some debris that had eroded from the core of the structure. An apron or circular stone revetment (F35) protected the sides of the roughly $9 \times 6$ m tower but most of this revetment has also eroded away except along the northern side of the structure where it also supports the lower courses of terrace wall (F33). It is composed of limestone boulders and cobble cemented in place with heavy grey mud mortar. In order to trace the perimeter of the structure at its apex, a $5 \times 5$ m trench was opened with the added purpose of reaching the core of the tower to see how it was built. A sterile layer of topsoil (L41), 0.10 m thick and devoid of pottery, was excavated. It consisted of decomposed chalk that had decayed from the stones of the tower. It sealed a layer of agricultural soil (L42) made up of extremely compact brown granular earth full of limestone pebbles and occasional cobbles. One hundred and six shards were collected from this layer, of which 33 were Gaza Ware jar fragments and the rest were late Hellenistic to Early Roman. This layer sealed another layer of agricultural soil (L43) composed of MBF soil containing inclusions of very small limestone pebbles. Fourteen shards were found in this layer and these were Late Hellenistic to Early Roman in date (typology predominantly first to third century AD in form). L43 covered a fill of chalkstone cobbles and pebbles (F6) that forms the core supporting the body of the tower. The core has not yet been probed; however the outline of the stone making up the core may mark the limits of the presumed super-structure supported by the stone tower. No wall lines or foundation trench were seen which would demonstrate
that a second-floor room existed on top of the stone construction, but further excavation will be necessary to decide this issue.

**Southern watchtower F16 and buttress F17** (Figs. 21, 26 and 27; pottery Fig. 41)

Watchtower F16 was cleared of collapse and some debris that had eroded from the upper part of the tower. Buttress F17 supports the east face of the watchtower F16. A probe was cut at the northeastern juncture of F16 and F17. The tower was founded upon the sloping bedrock but the buttress was founded on a layer of eroded agricultural soil (L5).

Fig. 26. Southern tower F16/17 plan
Area C: ‘dry’ farm above Area B

Above and to the west of Area B lay a series of ‘dry’ farm terraces which originally ascended to the crest of the hill. Earlier construction of private homes, the recent construction of a road and the current construction of apartments have either covered or obliterated most of the terraces associated with this area. Four of the remaining terraces were investigated.

The terraces that exist on the bedrock plate delineating Area C were cleared of vegetation and traced over their entire length. These terraces have now been numbered and appear on the plan encompassing Areas B and C. For the most part, the terraces follow the rock scarp, breaking in a series of natural steps spaced approximately 7 m apart. Olive trees and carob trees are currently growing on these terraces.

Area C-1 extended upper terrace (Figs. 21, 28; pottery Fig. 42)

Two trenches (each 1 m wide) were cut through the agricultural layers perpendicular to the terrace’s retaining wall. Both the northern trench and the southern trench confirm that the terrace was built upon the natural (unquarried) surface of the face of the slope. The soil is consistent from the rock floor until the present surface, which was covered with a layer of crushed Eocene limestone. The retaining wall was built with a foundation core of Eocene stones (0.05 × 0.05 to 0.20 × 0.20 m) and a revetment of larger stones (up to 0.30 × 0.30 m). A row of stones (one to two courses deep) follows the line of the terrace separating the cobbled core from the terrace soil. (Mediterranean Brown Forest soil: brown: 7.5YR 4/4; 2% very fine to fine limestone grains.)
The southern trench has a roughly square-cut indentation in the rock surface (a press?). The earliest diagnostic pottery (first century AD) was found in this terrace. This is our first indication that the elliptical terraces on the upper parts of the hill predate the more complex terraces of Area B and the rock-cut terraces of area A. A well-cut stone measuring approximately $0.50 \times 0.40 \times 0.35$ m was found in the terrace soil, which may tentatively be dated to or predate the time of the terrace’s construction.

**Area C-2 ‘wet’ farm terrace** (Fig. 21)

Massive retaining wall (similar to Area B) with larger than usual stones used for both the cobbled core and the revetment. The stones are better fitted together. The exposed surface of each stone of the revetment was chiselled flat. Due to these characteristics it seems quite possible that this section of terrace was merely an extension of the Area B ‘wet’ farm. No test trenches were cut, although a section of the terrace wall was cleaned near the dirt road dividing Area B from Area C.

**Area C-3 elliptical terrace F02** (Figs. 21, 29; pottery Fig. 43)

The excavated trench seems to indicate that there was no intentional layering of the terrace soil. (Mediterranean Brown Forest soil: dark reddish brown: 5YR 3/3; 3% very fine to medium limestone grains). The Area C-3 terrace retaining wall (F02) consists of the usual earthen embankment of soil, cobbles and pebbles that was preserved to about 1.1 m in certain sections with one to five courses of a revetment preserved. Where the terrace retaining wall was founded upon bedrock, a shallow groove or trough was cut in the rock surface to create a consistent foundation for the revetment of the retaining wall. Where the retaining wall rested on natural soil, a foundation trench was cut in the soil and larger stones lined the
bottom of the trench to provide a firmer foundation for the revetment wall. The terrace ends were typically ‘capped off’ by incurring the ends of the retaining walls up-slope.

Added to this, at least in the section exposed by the trench, at least a metre of bedrock appears to have been cut horizontally along the western side of the retaining wall to a depth of about 45 cm, effectively retaining an additional amount of imported soil. This would have allowed for deeper rooted trees, including olives, to be planted on the terrace. The modified rock surface seemed at first to indicate the existence of an earlier quarry or a pool. However the rough, natural form of the bedrock in the rest of the trench stood against the first idea. The shallowness of the depression makes the second theory unlikely.

The surface layer of this terrace (L04) contained little pottery but included some Gaza Ware jar fragments and sherds of a brown glazed bowl, medieval or later in date. The next layer (L05) consisted of compact MBF soil. The majority of the pottery was first to third centuries AD. These two layers were separated by what appears to be the remains of a partially eroded earthen embankment of an earlier retaining wall (F06) whose upper limit was submerged just below layer L04. Below layers L05 and L08 were two relatively dark and more clayey layers that were devoid of pottery (L07 and L09 respectively) and likely consisted of original soils produced on the natural slopes.

The terrace of area C-3 was actually two superimposed areas of terracing. However, what was originally two terraces with two retaining walls during the Roman Period was later converted to a single deeper and sloping terrace with a single retaining wall serving during the Islamic period. It seems that during the Roman Period the narrow and relatively shallow terraces were utilized for a vineyard while the terraces were modified during the Islamic period to plant trees (likely olive).

**Area C-4 U-shaped lower terrace F02 (Fig. 21)**

Terrace F01 is 25 m long. It was built of limestone cobbles, most of which have eroded off the edge of the limestone plate, leaving just one or two courses of
the face of the terrace. The north end of the terrace breaks at a point where the bedrock is stepped back and rises sharply. At this point another terrace wall (F03) extends for approximately 15 m. This wall also is poorly preserved. In both terraces the body or core made up of cobbles and pebbles is better preserved. The retaining wall core acts as an embankment, holding back the farm soils and keeping them from washing away down the slope.

**Agricultural ‘dry’ terraces**

The Nazareth archaeological project is important in that it provides essential data on the historical development of a terraced agricultural landscape in the Galilee; data which hitherto has been sorely lacking (cf. Golomb and Kedar 1971). While terracing has been researched fairly comprehensively in the Judean Hills (Ron 1966; Gibson 1995; idem 2001: 113–116) the same cannot be said for the Galilean Hills. The word ‘terrace’ is used to denote an entire structure which includes bedrock (levelled by hand or left natural), the retaining wall, and, perhaps most importantly, the agricultural soils which have been prepared for growing crops. The retaining wall is intended to protect the soils from erosion. Most of the terrace structures we have studied have a bipartite structure: (1) cobble, pebble and soil, earthen embankment which limits and protects the agricultural soils from erosion.

![Fig. 30. First-century fresco from Pompeii depicting terraced vineyards on Mt. Vesuvius and nearby low-land trellised vineyards, both with watchtowers](image)
Fig. 31. Area C-3 foundation groove, trench and eroded embankment

Fig. 32. Primary dry farm terrace types: elliptical and extended
(cf. Fig. 31); and (2) a leaning revetment of uniform and evenly spaced stones which served to protect the earthen embankment from erosion and collapse. Ideally, the stones of the revetment should be roughly conical or pyramidal in shape, with the flat ends facing outward to form a consistently smooth surface. The pointed ends face inward, fusing with the earthen rampart or the agricultural soils. As a means of protection against collapse, foundation trenches for the stone revetments were cut into the bedrock or the natural soil, serving to create firm, non-shifting foundations for the walls (Fig. 31). Capping of the ends of each terrace was also necessary in

Fig. 33. ‘Pothole’ agriculture in bedrock including olive tree, fig tree and various herbs

Fig. 34. Reconstructed extended terraces and elliptical terrace with quarry
order to impede erosion of the soil layers. This was done by creating an upslope curve in the line of the retaining wall at either end of the terrace (Fig. 31).

We have distinguished a number of types of terrace soil layers: *Simple*: (e.g., Area C-1) comprising a single layer of imported soil. The soils tend to be local soils (e.g. brown rendzina, i.e. Mediterranean brown forest soil, for the Nazareth Ridge) from nearby ravines or alluvial soils which have been transported by donkey from more distant plains and valleys. *Complex*: At least two intentionally layered terraces have been identified and excavated, one from terrace F7 of the wet farm Area B-2 which is still preserved to a height of 2 m (Fig. 35), and one from the dry farm (Area A-1; *supra* Fig. 5). Multi-layered terraces typically have up to 5 distinctive layers, with imported clean soil (Layers 4 and 2) and limestone pebble/chalk layers which produce aeration for plant roots (Layer 3) and a protective structure and barrier to keep soil from flushing through the interstices in the terrace wall (Layer 1). A layer of fertilizer and decaying vegetation often covers the soil surface when the terrace is still being farmed, providing a fifth layer.

Typical layers as illustrated from Area A-1 (counting from bottom up): Layer 4a: mixed recent soil and debris (replacing missing layer 5); Layer 4: Mediterranean brown forest soil (brown: 7.5 YR 4/3; with 10% small to coarse grains); Layer 3: crushed Eocene limestone debris (white: 10YR 9/1 [off chart]); Layer 2: Mediterranean brown forest soil (dark brown: 7.5 YR 3/2; with 10% small to medium limestone grains); Layer 1: crushed Senonian chalk (very pale brown: 10YR 8/3). At times the modifications of the terrace

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**Fig. 35.** Dry farm terrace drainage system at work; note water stains on rock surface
contains multiple and diverse features added at various periods (e.g., C-3; Fig. 29), normally dictated by water availability and changes in the choice of crops.

It is assumed that the earliest stage in the morphology of this landscape was ‘pot-hole’ agriculture, with the utilization of natural pits in the rock surface and crevices. It is assumed that this type of agriculture was employed by people who found they could utilize the natural deposits of soil in the hill country in order to plant their crops and fruit-bearing trees (elsewhere this is assumed to have taken place in the Chalcolithic or early stages of the Early Bronze Age: Finkelstein and Gophna 1993: 12–13; Gibson and Rowan 2006: 104–105).

The depth and area of these plots were at times extended by adding a small wall on the downhill side of the hole, thus maintaining and protecting the holes from soil erosion and providing room for even more soil to be added. The depth and breadth of the plot would in part have determined what crop could grow there. The volume of soil could be increased by cutting the holes deeper into the bedrock or by adding a single row of stones on the down-slope side of the plot. This latter practice likely led to the invention of the elliptical terrace.

**The elliptical (U-shaped) terrace**

Normally formed by a U-shaped wall which exploited the contours and recesses of the natural rock surface which had been carved by natural forces (e.g., water and wind erosion). The depressions and valleys formed by water erosion in the otherwise rounded rock aid in the channelling of rain to the plot during the seasonal rains. Improving the bedrock: in various instances the bedrock may be hewn into in order to provide more breadth and depth of soil for deeper rooted plants and especially trees. This is usually done by digging a bowl-shaped pit in the bedrock to contain the roots of a single tree, as was evident in a certain places in area A. However, as in Area C-3, a broader area of bedrock might be excavated to provide room for a number of trees. One olive tree, or at the most two, is the norm for a single standard elliptical terrace.

Although the more primitive elliptical terrace came into use earlier than the more sophisticated extended rock-hewn terrace, the elliptical terrace continued to be used contemporaneously with its preferred counterpart until modern times (cf. the elliptical and extended terraces juxtaposed in Fig. 34).

**The extended (I-shaped) terrace**

The most effective terrace for farming is one which is level or slightly down-sloped and extends over many tens of metres with a uniform depth and breadth. This type may include any terrace whose platform has been levelled
or extended for the purpose of improving or extending the arable land available to the farmer. In the most favourable case the natural rock striations form uniform horizontal stepped platforms upon which the terraces can be built. In most cases, however, the platforms must be created artificially by levelling inconsistencies with loose rock and soil, or by cutting the bedrock to form a level platform, or both. A shallow groove is often cut into the natural rock surfaces to hold the foundation stones of the terrace’s revetment wall. The planting areas are often multi-layered with alternating layers of soil and crushed limestone/rock.

The extended terrace is the best-suited terrace for raising vines. The long, narrow and straight field within its retaining walls fulfills the form and function of a plot that is intended to be used for planting vines in rows, and then training each vine up onto long trellises with the herbage and fruit hanging down from above.

The morphology of ‘dry’ terraces in this peripheral landscape of Nazareth, may be summed up as follows:

(1) The dry farm terrace depth and width should be uniform.
(2) The length of the terrace should be level and extend as far along the hillside as possible in order to cover the maximum available area with soil for growing crops.
(3) The terrace floor and the surface of the land should be nearly level but gently sloping in order that the available water should cover the entire surface while allowing for proper drainage, thus preventing pooling of water, water wastage, and the consequent weakening of the integral structure of the terrace.

(4) The terrace, particularly on higher and steep hillsides, should be multi-layered with alternating layers of chalk/chipped rock and soil, providing aeration – especially for the roots of vines which are susceptible to rot. This layering also creates a firm structure to the soil of the terrace, discouraging erosion and the collapse of the terrace.

(5) Terrace walls should be of uniform firmness and aeration.

Agricultural ‘wet’ terraces

These are terraces which have been constructed in association with conduits and inlets for irrigating crops by water flowing from secondary sources, including springs and reservoirs.

Their morphology may be summed up as follows:

(1) This type of terrace needs to be well built with a strong retaining wall that can contain heavy water-laden and shifting soils.

(2) There must be a water dispersement system which will control available water and disperse it evenly over the entire area of the terrace.

(3) The soil must have an internal structure and consistency in its layering (preferably multilayered with alternating layers of chalk/rock and agricultural soils) in order that it is not flushed from the terrace during irrigation.

(4) The irrigated farm normally will be reserved for crops which cannot grow on a dry farm.

Appendix 1: the terrace steps in Area A

Layers and Features: Step 1

Step 1-1: Extended Terrace F1 (c. 14 m) unexcavated.
Step 1-2 + 3: Extended Terrace F1a + 1b (c. 43 m) unexcavated. This may well have once formed one continuous terrace with Step 1-1 if the connection between the two has eroded away.
Step 1-4: Terrace F9-10 (c. 25 m) unexcavated. Area was built over by development of Nazareth Village.
Step 1-5: Elliptical Terrace F10a (c. 25 m = Area A-3, cf. supra). Stairway F10b, Terrace erosion L10c. Area was displaced by development of Nazareth Village.
Layers and Features: Step 2

Step 2-1: Terrace F2a (c. 33 m; at least 3 m deep) unexcavated.
Step 2-2: Terrace F2–F3 (c. 23 m; 2.8 m of revetment wall preserved 0.85 m high, at least 3 m deep) unexcavated.

Layers and Features: Step 2A

Step 2A-1: Terrace F5a (c. 29 m; 4.65 m of revetment wall preserved 1.14 m high, at least 3.5 m deep) unexcavated.
Step 2A-2: Terrace F5 (c. 16 m; 2.8 m of revetment wall preserved 1.1 m high, at least 2.5 m deep) unexcavated.

Layers and Features: Step 3

Step 3-1: Extended Terrace F4 (c. 23 m; 9 m high, c. 6.5 m deep) erosion along wall was excavated and terrace was restored. Soils of terrace were evidently layered. Terrace wall was apparently founded on bedrock. This terrace should be considered a single unit with the Step 3-2 since the rear soil layers continue from one to the other at the same level and on the same plate of bedrock. The southern end of this terrace wall does not turn into the slope at this point, as would be the case if it was intentionally being ‘capped off’ in the normal fashion. This separation between the ends of each terrace apparently provided space for an earthen ramp that once allowed ease of access for workers and farm animals to and from the terraces below. The terrace was eventually restored.

Step 3-2: Extended Terrace F6 (c. 22.1 m, 1.5 m high, 7.6 m deep) erosion along wall was excavated. Soils of terrace were evidently layered similar in form to that of Step 3-1. The wall at its southern end curves up-slope to avoid intersection with the descending terraced road Step 3-3. Terrace wall was founded on bedrock. Terrace has been restored.

Step 3-3: Terrace F7–F8 (c. 45 m; 32 m of revetment preserved; c. 0.99 m high, at least 8 m deep). This is the longest terrace that can be traced at the site. It stands apart from the other terraces at the site in that it diagonally ascends the slope more than 10 m in elevation for its entire length of at least 45 m (the northern end disappears under the backfill from the building of the hospital). For much of its length the terrace was relatively shallow and bent in form, making it less useful agriculturally. Although a short line of stones helps to define the structure formally as a terrace, the soil was partly mixed with chalk and leached over most of the area. Since as a rule, the other terraces were built to form horizontal platforms (like planter boxes) of ample depth, its use as an agricultural terrace is unlikely. It seems more likely that the terrace formed an access road providing workers, farm animals and carts
safe and easy access to the fields without walking over the otherwise more treacherous smooth bedrock to and from Nazareth. Erosion along the wall was excavated and terrace was restored.

Step 3-4: Terrace F13 (c. 3.7 m long, 1.3 m high, 3.1 m deep) unexcavated. This relatively short terrace is built into a depression in the natural bedrock. Its wall, including the revetment, is preserved to a relatively impressive height of 1.4 m. Seepage of water through the body of the terrace can be detected by whitened lines of water residue which emerge from below the foundation stones of the revetment wall and descend toward the terraces below.

Step 3-5: Terrace F14. Quarry F5 = upper Area A-1 (cf. supra). In the southwest corner: a quarried basin roughly resembling a wine pressing floor was cleared in 1997. Although there is an apparently cut groove which would allow the fluids to drain to the level below, there is no evidence of a contemporary collecting vat.

Layers and Features: Step 3A

Step 3A-1: Terrace F11a, Quarry F20 (c. 23.5 m, 1.23 m high, 4.5 m deep). Terrace erosion in quarry excavated and terrace was not restored to leave quarry exposed extending below Step 3A-3 below.

Step 3A-2: Elliptical Terrace F11 (c. 23.4 m long, 1 m high, 7.14 m deep) All features of this terrace had been entirely eroded away, with the exception of the foundation trench that was cut for the placement of the revetment wall. This terrace was reconstructed for the modern visitor’s centre based upon information derived from other terraces at the site.

Step 3A-3: Elliptical Terrace F11b (c. 14.5 m long, 0.8 m high, 4.1 m deep). Where a terrace once stood whose original layered structure has been eroded away, a beautiful quarry (F20) was revealed under a layer of soil erosion (L10). The quarry is outstanding for the clear definition of its ashlar negatives which enabled us to obtain precise measurements on the size of individual blocks and the number of blocks extracted from a given space. One hole which was to serve as a chisel socket to break a layer of stone away from the bedrock (10 cm wide, c. 5 cm deep) still remains as though ready to receive the chisel and chocks that would serve to strip away the first layer of stone. Terrace was not restored, in order to leave quarry exposed.

Layers and Features: Step 4

Step 4-1: Terraced Road F12a (at least 35 m, would have been c. 1.2 m high, at least 7.5 m deep). This terrace appears to represent the extension of the road/terrace 3-3 beginning at the western end of terrace 4-2. The terrace was not restored. A modern visitors’ footpath has replaced it.
Step 4-2: Extended Terrace F12 (c. 29.4 m long, 1.1 m high, 7.2 m deep). Terrace erosion was excavated. Soils of this terrace appear to have been intentionally layered with alternating MBF soil and crushed lime/rock layers. The line of the retaining wall could be followed as the revetment, one course high, was preserved only in small sections. A groove was cut in the bedrock to hold the line of revetment stones. The terrace was restored.

Step 4-2A: Terrace F12b (c. 16.5 m long, 1.5 m high, 7.9 m deep). The curve in the terrace wall might be the first in a series of five elliptical terraces descending the slope at this point. However, it seems to be attached to extended terraces at either end and may have been curved to conform to a bend in the hillside. Terrace erosion was excavated and terrace was restored.

Step 4-3: Terrace F18 (c. 25.5 m long, 7.2 m of the original revetment could be traced, 1 m high, 3 m deep). Terrace erosion was excavated and terrace was restored to align on the east with Step 6-3 and to connect with elliptical terrace 4-2A immediately to the west. Terrace restored but utilized for path.

Step 4-3a: Terrace F18a (c. 15.3 m long, 0.85 m high, 5.1 m deep). Terrace erosion L56 excavated with several pieces of Kfar Hananiah ware; carstic cavity F59 containing fill L57 with Kfar Hananiah ware. Terrace restored. Partially cut by the Nazareth Village oil press building.

Step 4-4: Extended Terrace F15 (c. 31 m; existing revetment wall 11.2 m long, 0.9 m high, 2.6 m deep). Terrace erosion L62 (which covers in situ farm soil L63) excavated and found to contain several Kfar Hananiah ware sherds. Terrace restored to its full length. Partially cut by the Nazareth Village oil press building.

Step 4-5: Elliptical Terrace F16 (c. 37 m) = Area A-1 (cf. supra). Agricultural soils L1–L4a and terrace erosion excavated. Quarry F5 exposed. Area was displaced by Nazareth Village.

Layers and Features: Step 5.

Step 5-1: Elliptical Terrace 16a (c. 17.5 m long, 0.8 m high, 4.1 m deep). Terrace was not restored, in order to leave quarry exposed.

Step 5-2: Terrace 16b (c. 19.3 m, 1.4 m high, 8 m deep). Five metres to the east on the same plate of bedrock as Step 5-1, another layer of eroded debris (L11) was excavated. It covered a slightly modified area of bedrock (F21) that had once supported an agricultural terrace now completely eroded away.

Step 5-3: Terrace 16c (c. 26.9 m, 1.5 m high, 7.73 m deep). Another probe, again 5 m to the east, was excavated in a place where the bedrock (F22) forming a natural ridge 5 m long was adapted to serve as a terrace, the superstructure of which has eroded away. Because this bedrock ledge rises
40 cm up from the parent rock, it never lost its soil deposit (L12) of rich brown loam. The pottery in this layer was exclusively Roman.

Step 5-4: Terrace F19 + F20 (c. 37.7 m long, 2 m high, 4.4 m deep). Terrace erosion L47 excavated. This erosion covers \textit{in situ} MBF agricultural soil L63. With the aid of four students and volunteers, three trenches were cut in the terrace, revealing that although there was evidence of upkeep and rebuild in the sloped layers, the soil was consistent except for a layer of crushed chalk spread over the bedrock. This would indicate that the terrace was constructed originally as a single layer of imported soil, but it appears to have been deposited on a layer of crushed chalk to impede erosion along the bedrock due to the yearly rains. This may have originally connected to Step 4-3 to form an extended terrace. Quarry F58; cut shaft F67. Terrace restored.

\textit{Layers and Features: Step 6}

Step 6-1: Elliptical Terrace (c. 24.5 m long, 1.1 m high, 7.45 m deep). Terrace erosion L50 excavated. Not restored.
Step 6-1A: Extended Terrace (c. 31.5 m long, 1 m high, 5.2 m deep). Terrace erosion excavated. Restored.
Step 6-2: Terrace F22a (c. 17 m +). Terrace erosion L41 excavated. Terrace wall F2; Quarry F20. Restored.
Step 6-3: Terrace F21a (c. 30.7 m long, 2 m high, 5.4 m deep). Two 2-m sections of revetment preserved. Terrace erosion L47 unexcavated.
Step 6-4: Terrace F21 (c. 48.7 m long, 2 m high, c. 7.4 m deep). About 10 m of revetment partially preserved. MBF agricultural soil L69 unexcavated.

\textit{Layers and Features: Step 7}

Step 7-1: Elliptical Terrace F23a (c. 21.5 m long, 1 m high, 9.9 m deep). Terrace erosion L51 was excavated and terrace restored.
Step 7-2: Extended Terrace F23b (c. 27.7 m long, 1.1 m high, 3.8 m deep). Terrace erosion L52 excavated.
Step 7-3: Extended Terrace F23 (c. 17.8 m long, 1.55 m high, 7.6 m deep). Terrace erosion L42 excavated. About 6 m of the revetment to retaining wall was preserved up to 6 courses high – 60 cm founded primarily on soil layer with crushed chalk. The agricultural soils comprise one somewhat inconsistent layer of MBF soil pitted with clusters of stones, softball sized and smaller.
Step 7-4: Elliptical Terrace F23c (c. 17.7 m long, 2 m high, 10 m deep). Terrace erosion L61 excavated. Terrace restored.
Step 7-5: Extended Terrace F22 (c. 17 m long, 2 m high, 7.4 m deep). Terrace erosion L61a excavated. Terrace restored.
Layers and Features: Step 7A
Step 7A-1: Terrace F24a (c. 28.8 m long, 1.2 m high, 3.3 m deep). Terrace restored.
Step 7A-2: Terrace F24b (c. 24.4 m long, 1.2 m high, 6.6 m deep). Terrace restored.
Step 7A-3: Terrace F24c (c. 24.4 m long, 1 m high, 3.6 m deep). Poorly preserved. Unexcavated. Terrace not restored.

Layers and Features: Step 8
Step 8-1: Terrace F24 (c. 23.4 m long, 1.2 m high, 3.4 m deep). Terrace erosion L53 excavated. Terrace restored.
Step 8-2: Terrace F25a (c. 31 m long, c. 1.2 m high, 3.5 m deep). Terrace erosion L49 excavated. Terrace restored.
Step 8-3: Terrace F25 (c. 17 m long, 1 m high, 2.9 m deep). Poorly preserved. Unexcavated. Terrace not restored.

Layers and Features: Step 9
Step 9-1: Terrace 26a.
Step 9-3: Terrace F28. Terrace erosion L54 excavated.

Layers and Features: Step 10
Step 10-1: Terrace F27a.
Step 10-2: Depression and Cave F27b, bones of small carnivore. Terrace erosion L54b (3 diagnostic: 1 early Roman, 1 Islamic, 1 Ottoman early porcelain; 17 body sherds).
Step 10-3: Wine Press F27 = Area A-2 (see supra).

Appendix 2: Pottery (Yehudah Rapuano)
The ceramic finds from the Nazareth Village Farm excavations were for the most part quite fragmentary, as might be expected of pottery recovered from agricultural installations and terraces. Several periods are represented, illustrating the extensive duration of time from the earliest to the latest settlement and use of the farm (Figs. 37–44; Table 1). It is apparent that the farm territory was not occupied continuously. It seems that each area may have been in use during some of the periods represented, and was abandoned or
at least left dormant in other periods. In no single area of the site was pottery of all the periods represented found. The surface finds include examples at either extreme of the chronological range of our site. A single potsherd of an Early Bronze Age III platter (Fig. 37:1), with a thickened, incurved rim, represents the earliest find at the Nazareth Farm. It is finished with a typical burnished net pattern on its interior surface. To date, no Early Bronze occupation has been recognized and this is the only artifact recovered from this period at the site. At the other end of the chronological spectrum, an entirely intact bowl made of Black Gaza Ware (BGW) with an externally thickened incurved rim dates to the Ottoman period.

The earliest occupation seems to have occurred in the late Hellenistic period of the first and second centuries BC. Examples dating to this period were primarily the jar and jug sherds discovered in Area B-1. A single jug base of this period was also found in Area A-2 (Fig. 38:5). The horizontal handle of the krater (Fig. 38:6) may derive from this period as well. A small amount of material dated to the Early Roman period of the first century BC to first century AD was found in Areas A-1, A-2, and C-1. The best represented pottery at the site was dated from the Late Roman to the early Byzantine period of the third to fourth or fifth centuries AD. The only area in which pottery from this period was not found was Area B-1.

Two sherds, apparently remnants from a single bowl, of a fine red ware and decorated on their interior surfaces with a golden-brown, speckled, glossy glaze for which no parallels were found, probably date to the Ottoman period. Not illustrated, also of Ottoman date, were several fragments of jars and spouted jugs of dark gray BGW from Areas A-3, B-1, and B-2.

The pottery generally exhibits characteristics typical of the Galilee region. This is especially observed in examples of the Early and Late Roman periods: in the Galilean bowls (e.g. Figs. 38:1; 38:2; 39:1; 41:4; 42:1; 42:2; 43:2; and 43:01, as well as in jars (e.g. Figs. 37:5; 38:4; 39:2; 41:18; 41:16; 41:21; 42:6; 43:9; and 43:13). Also the Byzantine period lid, decorated with bands of combing on its exterior, recovered from Area B-1 (Fig. 40:1) is typically Galilean. Nothing in the way of fine or imported ware was found in the excavations (with the possible exception of a Byzantine period rouletted bowl (Fig. 41:1), and glazed bowls (Figs. 43:5; 43:6; 43:7; and 43:8). All the forms were of a utilitarian nature, emphasizing the rural character of the site.

The sparse, fragmentary nature of the pottery did not permit us to determine the ethnic identity of the occupants of the farm territory in any of the periods. Nevertheless, it may be observed that in the Early and Late Roman periods, the ceramic forms are largely familiar from the Kfar Hananiah pottery repertoire, noteworthy for its having been manufactured primarily for the consumption of those observing Jewish halacha (Adan-Bayewitz 1993).
Description of the pottery by area

Area A-1

A-1 – Locus/Layer 1

No pottery was drawn from Locus/Layer 1. Among the potsherds recovered was a single body sherd which was possibly modern.

A-1 – Locus/Layer 2

Fig. 37:2 is a vertical loop handle, evidently of a krater. This form of vessel is common in the Hellenistic and Roman periods.

A-1 – L10

The pottery recovered from L10 included two everted-rim bowls (Fig. 37:3 and Fig. 37:4) evidently both of the earlier type, without the distinguishing characteristic of a carinated upper body, dating from the mid-first century BC to mid-second century AD (Adan-Bayewitz 1994: 111–119). These bowls were actually small casseroles. A-1–10:1 has a vertical strap handle springing from its rim.

Fig. 37:5 is the slightly everted rim and cup-shaped neck of a storage jar dating to the mid-first century BC to mid-first century AD.

Fig. 37:6 is the vertical strap handle of a cooking pot that evidently dates to the Roman period.

Fig. 37:7 is a juglet with a thickened, everted rim and carinated neck, dating to the first to second centuries AD.

The pottery forms from this Locus/Layer range in date from the mid-first century BC to the second century AD. As a group they all fit comfortably within the first century AD.

Area A-2

A-2 – L1

This locus/layer featured two Galilean bowls, Fig. 38:1 (Adan-Bayewitz 1993: Type 1A) with a single groove on the rim (dated later first century to third century AD), and Fig. 38:2 (Adan-Bayewitz 1993: Form 1B) with a double groove on the rim (dated late first century or second century to mid-fourth century AD).
Fig. 38:3 is the folded, everted rim and short, cylindrical neck of a storage jar that may date to the Herodian period, and Fig. 38:4 is the rim of a storage jar of the Late Hellenistic period. The base of a jug, Fig. 38:5, could date either to the late Hellenistic or Early Roman period. The drawn pottery gives the impression that this locus/layer dates mainly to the Hellenistic to Early Roman period. Among the pottery sherds that were not drawn, however, there was a bowl evidently dating to the fourth to fifth centuries; an Islamic period bowl with a green glaze; and an example of what appears to be early porcelain, probably dating to the Ottoman period.

A-2 – L2

The single drawn example from this locus/layer, is a vessel, Fig. 38:6, probably a krater or a casserole, with a horizontal handle, possibly dating to the Late Hellenistic or Early Roman period.

Area A-3

A-3 – L1

Fig. 39:1 is a Galilean bowl (Adan-Bayewitz: Form 1E) with a simple rim, that dates from the mid-third century to the early fifth century AD. Fig. 39:2 is a storage jar with an inverted – everted rim (Meyers, Meyers and Strange 1976: 220–222) dating to the third century to fifth century AD. Fig. 39:3 is evidently the base of a juglet of the second century to third century AD. The pottery that was not drawn included a Galilean bowl body sherd; another body sherd which may date to the Abbasid period; and Gaza Ware fragments dating to the Ottoman period.

Fig. 39. Pottery from Nazareth village farm. Area A-3.
Area B-1

B-1 – F8
Fig. 40:1 is a cooking pot lid decorated with bands of straight combing. It likely dates from the mid to late Byzantine period.

Fig. 40:5, Fig. 40:6, Fig. 40:7, and Fig. 40:2 are jars or jugs with thickened, rounded rims dating to the Hellenistic period, probably the second century BC. Fig. 40:6 and Fig. 40:7 have rims that are concave on top. Fig. 40:8 also belongs to this group. It is clear that it is a jug because of the loop handle springing from its rim.

Fig. 40:3 is a storage jar with a relatively short square folded rim probably also dating to the second century BC.

Fig. 40:4 is the incurved rim and cup-shaped neck a storage jar of the Hellenistic period or early Roman period.

The undrawn pottery consisted of what appeared to be Roman period body sherds; some possibly Islamic period body sherds; and a Gaza Ware water jar. This locus/layer, predominantly dates to the mid to late Hellenistic period with a few, possibly intrusive, sherds from the Islamic and Ottoman period.

Area B-2

B-2 – L5
There was no pottery drawn from this locus. It consisted predominantly of Roman body sherds.

B-2 – L7
No pottery was chosen to be drawn from this locus. It included a rim, handle and body sherds evidently dating to the Roman period.

B-2 – L30
Three potsherds, all of storage jars, were drawn from this locus/layer.

Fig. 41:19 with a very short cup-shaped rim, dates from the second century to the fifth century AD, and

Fig. 41:18 with a short fold on the inside of its rim belongs to the Byzantine to early Islamic period.

The loop handle B-2 – L30:3 (Dr. 04:01 1998) evidently belongs to an early or middle Roman period storage jar of the first to third century. The undrawn pottery dated to the early Roman; Byzantine; and early Islamic periods.
B-2 – L31

Fig. 41:1 is a deep bowl decorated with a double groove on top of its rim and a ridge on the exterior edge of the rim. It is decorated with rouletting on its exterior wall and covered with a dark reddish-brown wash. It dates to the Byzantine period, probably the fourth century to the fifth century, but may date as late as the sixth to early seventh century AD.

Two Galilean bowls were drawn: Fig. 41:4 has a plain rim (Adan-Bayewitz 1E) and dates to the mid-third to early fifth century AD. Fig. 41:5 is a very small fragment that is evidently an Adan-Bayewitz Type 1B Galilean bowl, with two grooves on top of its rim, dating to the late first or early second century to mid-fourth century AD.

Fig. 41:13 is a globular cooking pot with long loop handles springing from its rim, dated from the fourth century to the sixth century AD.

Fig. 41:6 is a casserole or casserole lid with a bevelled rim. Such vessels appear from the middle Roman throughout the Byzantine period and into the early Islamic period.

Fig. 41:21 is a storage jar dating from the third century to the early fifth century AD.

The storage jar handle (Fig. 41:25) appears to belong to a vessel of the early to late Roman period of the first to third centuries AD.

Fig. 41:22 is probably the neck and shoulder of a storage jar dating to the first to third centuries AD.
Fig. 41:34 is a fragment of a cooking jug with a perforated strainer suspended between its neck and its shoulder. It likely belongs to the middle to late Roman period (late first to third centuries AD). The undrawn pottery seemed to belong to more or less the same periods as that of the drawn pottery. Some of the sherds may date to the late Hellenistic period but the rest evidently belong to the late Roman to Byzantine periods. It included what may have been Beth Shean jar fragments and a fourth to sixth century cooking pot.

**B-2 – L34**

Fig. 41:8 Tiny fragment of a rim, probably of a small bowl of the Roman period.

Fig. 41:16 is a storage jar rim (or possibly a jug) evidently dating to the third century to early fifth century.

Fig. 41:17 is the incurving rim of a jug (or possibly jar or pot) of the Roman period.

Fig. 41:20 is the rim of a Gaza Ware jar belonging to the Ottoman period.

Fig. 41:28 is a storage jar handle from the early Roman period to the early Byzantine period.

The undrawn pottery was similar in date to that of the drawn pottery. There was an early Byzantine (third to fifth century) jug and a fragment of an Ottoman cooking pot whose ware contained many shell inclusions.

**B-2 – L36**

The single example drawn from this locus/layer, Fig. 41:2, is evidently the rim of a bowl or casserole. It is likely an everted-rim bowl (Adan Bayewitz Type 3). The key to determining the precise dating of this type is whether it had a rounded or carinated shoulder. Since its shoulder did not survive it must be dated generally from the first century to the later fourth century AD.

**B-2 – L42**

Two examples were drawn from this locus/layer:

Fig. 41:15 is a cooking pot with many shell inclusions within its fabric.

Fig. 41:32 is the strap handle of a jar or jug made of Gaza Ware. Both examples date to the Ottoman period.

**B-2 – L43**

Three very fragmentary sherds were drawn from this locus/layer:

Fig. 41:8 is the edge of the rim of what was evidently a Galilean bowl with a plain rim (Adan-Bayewitz Type 1E), dating from the mid-third century to earlier fifth century AD.

**B-2 – L44**

The single example represented from this locus/layer Fig. 41:29 is a storage jar handle evidently dating from the first century to the third century AD.

**B-2 – L45**

None of the pottery of this locus/layer was chosen for drawing. It included Roman body sherds and a single Gaza Ware sherd (personal communication from R. Voss).
Fig. 41:26 and Fig. 41:27 are both handles of storage jars tentatively dated to the first to third centuries.
The undrawn pottery appeared to be of the same date as the drawn pottery: the first to third centuries AD.

**B-2 – F2**
The single example drawn from this feature (Fig. 41:30) is a storage jar handle evidently dating from the first century to the third century AD.
The undrawn pottery included evidently early Roman period sherds as well as fragments of a Beth Shean jar dating to the Byzantine period and Gaza Ware dating to the Ottoman period.

**B-2 – F3**
None of the pottery of this feature was drawn. It consisted of Late Roman period to Byzantine period sherds and Gaza Ware fragments of the Ottoman period.

**B-2 – F5**
A single example was illustrated from this feature:
Fig. 41:32 is a storage jar (or possibly a jug), possibly dating to the third century to early fifth century AD.

**B-2 – F6**
A single example was drawn from this feature Fig. 41:7 is a Galilean bowl (Adan-Bayewitz Type 1B) with 2 grooves on its rim, late first century or early second century to mid-fourth century AD.

**B-2 – F7**
Fig. 41:4 is evidently the rim of an everted-rim bowl, possibly Adan-Bayewitz Form 3B, dated from early second century to the later fourth century AD.
Fig. 41:14 is the rim of an Ottoman period cooking pot. There are many shell inclusions within the fabric of the vessel.
Fig. 41:23 is the rim and neck and **B-2 – F7:4**, the handle, of Gaza Ware jars or jugs of the Ottoman period.
In addition to the drawn pottery there were many more Gaza Ware sherds. This feature clearly dates to the Ottoman period.

**Area C-1**

**C-1 – L1**
Fig. 42:1 is a Galilean bowl (Adan-Bayewitz Form 1D) bearing two grooves on top of its rim. It dates to the late first or early second to the mid-fourth century AD.
Fig. 42:6 is a jar dating to ca. 50 BC–AD 70.
The deep grooves on handle Fig. 42:7 suggest that it may date from the third century to fifth century AD.
Fig. 42:8 is evidently the body and base of a piriform unguentarium. This form first appeared toward the end of the first century BC and continued to be produced throughout the first century AD. The undrawn pottery from this locus/layer is predominantly of the Roman period.
Fig. 42:2 Galilean bowl (Adan-Bayewitz Type 1B). The undrawn pottery included what appears to be a third to fourth century jar handle. All the pottery from this locus/layer evidently fits well in the third to fourth century. Fig. 42:4 is a deep bowl. Fig. 42:5 is a closed-form bowl with an incurved rim. Considering its context and likely parallels, it probably dates from the first to the fourth centuries.

Area C-3

C-3 – L2
Fig. 43:2 is a Galilean bowl (Adan-Bayewitz Form 1D) with two grooves on top of its rim. It dates to the late first or early second to the mid-fourth century AD.
Fig. 43:3 is a small bowl with a cupped rim.

Fig. 43:5 is the upper part of a hemispherical bowl with a shallow channel rim and dusky red glaze on its interior. No parallel was found for this bowl. It may date to the Ottoman period. Probably the same vessel as B-1/3 = (Dr. 2:5).

Fig. 43:8, also glazed on its interior, is possibly the base of this same bowl. Parallels for storage jar, Fig. 43:10, date from the second century to the fifth century AD.

Fig. 43:9 is the rim and neck of a typical Northern Israel storage jar possibly dating from the third to early fifth century AD.

Fig. 43:13 Juglet which probably dates from about the middle of the first century to the beginning of the third century AD.

The pottery that was not drawn from this locus/layer included what was evidently a second to third century AD storage jar shoulder with handle and a Hellenistic to early Roman body sherd.

C-3 – L4

Two bowls with glaze on their interiors and over the rim: C-3 – L4: 1 (Dr. 03:01 1998) and Fig. 43:6 join with Fig. 43:5 of L2.

Fig. 43:11 is a storage jar with a short upright rim and a collar-ridge at the base of its neck. It may date to the first to third centuries AD.

The undrawn pottery evidently dated to the early Roman and possibly late Roman period but also included more remnants of a glazed bowl.

C-3 – L5

Fig. 43:1 is a Galilean bowl (Adan-Bayewitz Type 1E) dated to the mid-third century to the earlier fifth century AD.

Fig. 43:3 is a krater dated possibly from the end of the first century to the mid-third century AD.

C-3 – F1

Fig. 43:12 is the shoulder of a storage jar that probably dates to some time in the Byzantine period.

Fig. 43:14 is the rim and neck of a jug or juglet probably dating from the late first through third century AD.

Fig. 43:15 is the rim and neck of a juglet possibly first to the beginning of the second century AD.

C-3 – L8.

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Bibliography