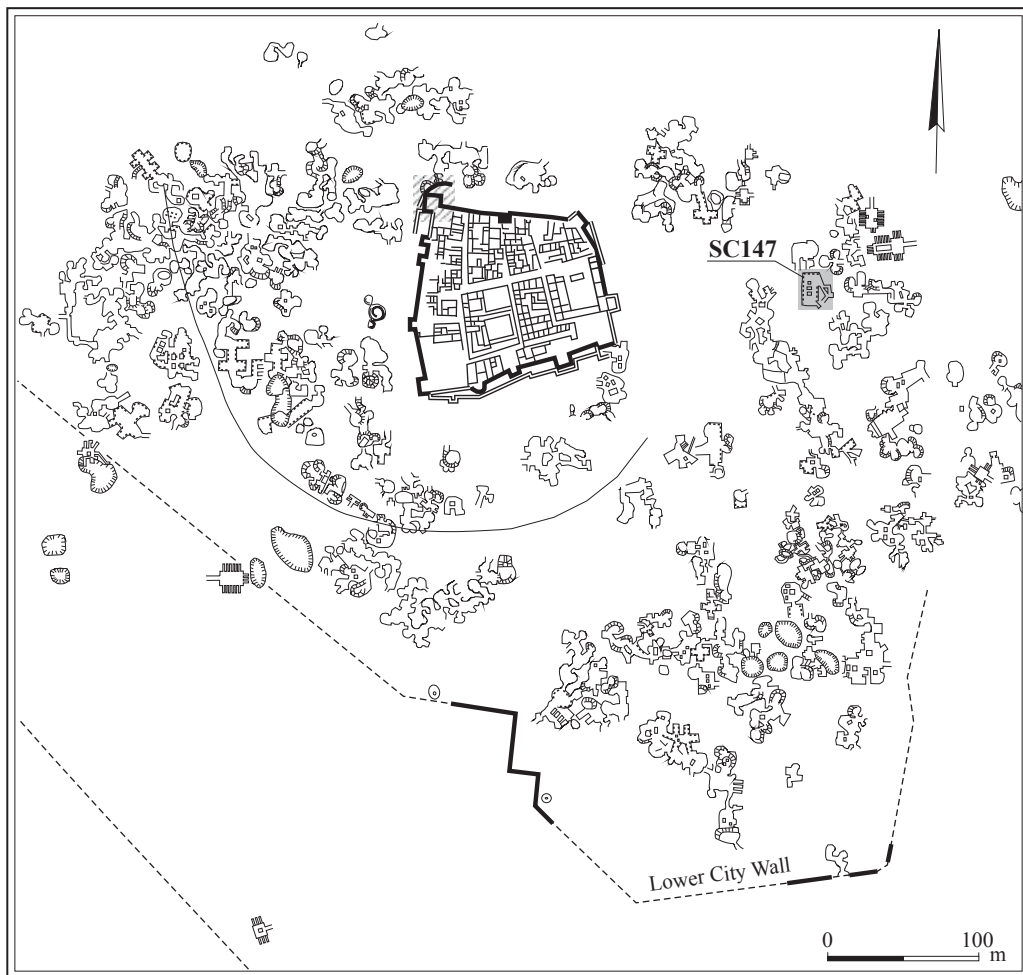


SUBTERRANEAN COMPLEX 147 AT MARESHA: THE CONSTRUCTION PHASES OF THE COLUMBARIUM

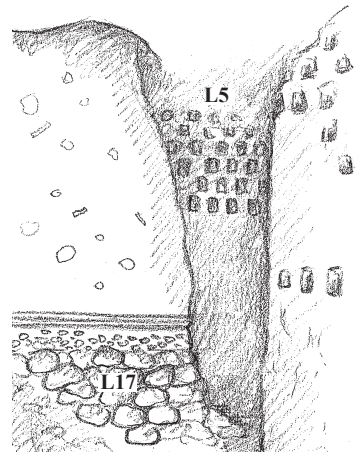
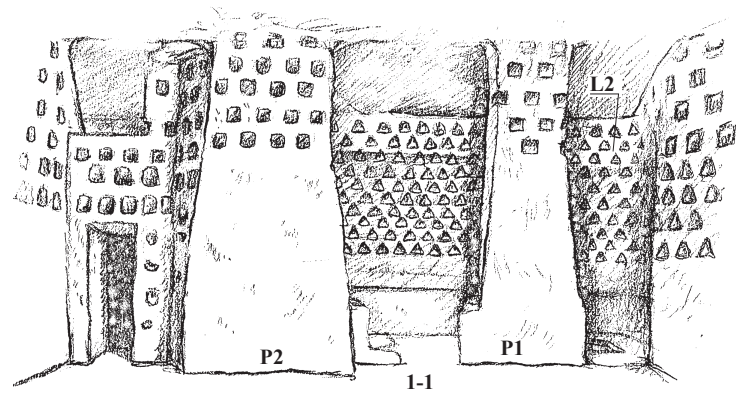
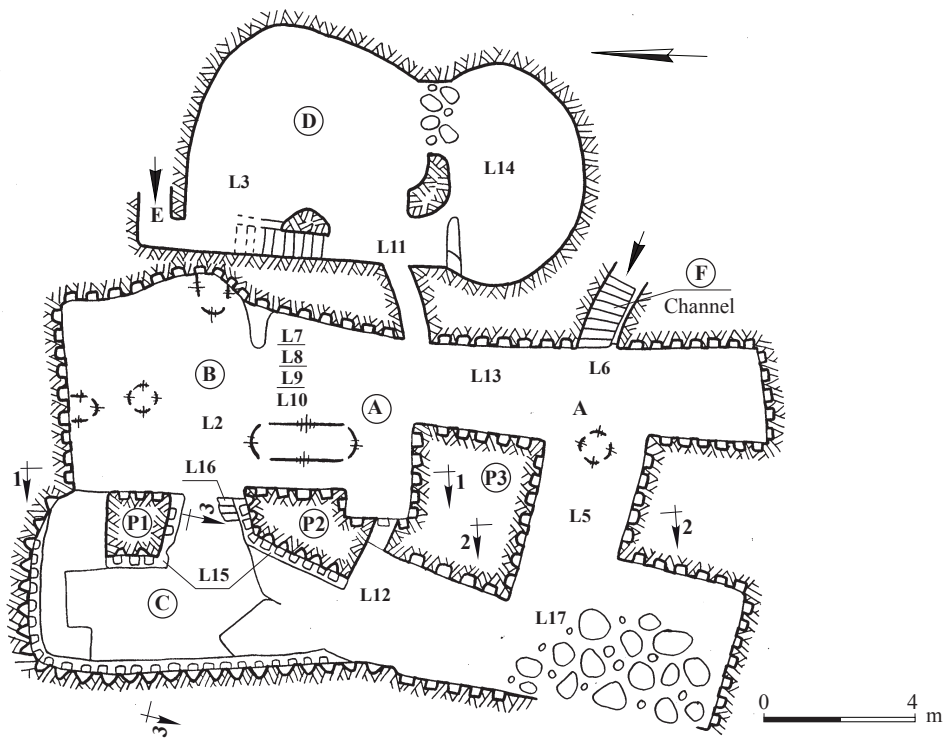
IAN STERN, BERNIE ALPERT AND AMOS KLONER

Over 85 columbaria have been identified and surveyed in the subterranean complexes of Maresha (Kloner 2003:45). The columbarium in Subterranean Complex 147 (SC 147; Plan 1), located 137 m east of the upper city of Maresha (map ref. 190776/611270) and 310 m above sea level, was excavated between

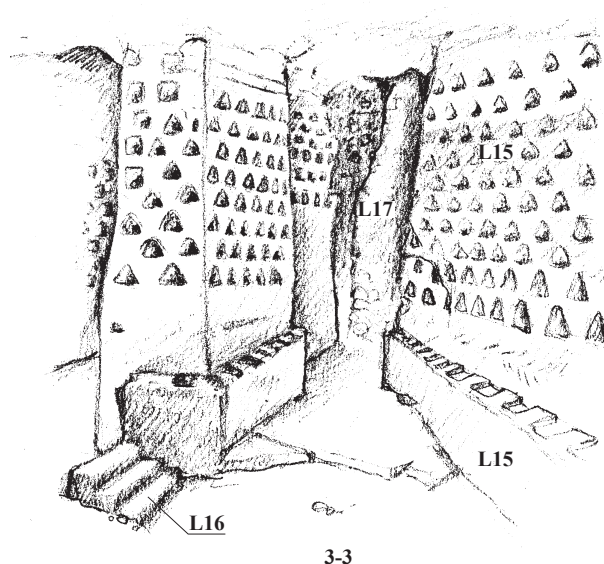
1993 and 2000.¹ This complex was selected for excavation due to its unusual architecture, and the fact that it was subject to frequent robberies. It comprises two rooms: one large rectangular columbarium on the west, and a smaller, roundish room on the east (Plan 2).²



Plan 1. General map of the subterranean complexes of Maresha (after Kloner 2003:31).



Plan 2. Subterranean Complex 147: plan and sections.



Plan 2. (cont.).

THE COLUMBARIUM

The columbarium in SC 147 is one of the largest at Maresha, measuring c. 20 m long, 9.5 m wide and 6.08 m high. It was divided into three architectural areas: Area A in the south, Area B in the northeast, and Area C in the northwest. The northern corners of the columbarium are somewhat rounded, and two unequal, rectangular 'legs' extend at the southeastern and southwestern corners; three bedrock pillars support the flat ceiling. The smaller room to the east was designated Area D. The columbarium in the western room was the main focus of the excavation, in which three construction phases were discerned.

Area A

The eastern portion of Area A extends from the northern side of Pillar 2 (P2) southward, and its western portion, from the southern side of P2 southward. There are two shafts in the ceiling: one large, oval-shaped shaft east of P2, and another shaft that pierces the ceiling southeast of Pillar 3 (P3; Plan 2). In addition, there is a staircase (F) of 14 steps in the eastern

wall that descends from the surface. The upper stairs were quarried through the *nari* crust and the lower ones, into the softer layer of chalk. A channel was hewn on the southern side of the stairway that runs down the eastern wall of the columbarium.

Between P2 and P3, a narrow wall was left unhewn with a large opening quarried through it (Plan 2: Section 1–1). The shaded area in Section 1–1 (L2) indicates the level of the debris when the excavation began. The only construction in the room, discovered in the southwestern leg of Area A, is a straight, stone-built wall of five courses (L17) whose function is unknown. The wall was covered by debris consisting of ash, silty soil, gravel, pebbles and chalk building blocks, which appears to have been dumped through an opening in the ceiling (Plan 2: Section 2–2).

In Area A, there are three different shapes of dovecote niches. The upper courses are irregular rows of large rectangular niches (approximately 29 × 24 cm, 31 cm deep), below which are somewhat smaller triangular niches (approximately 24 × 24 × 23 cm, 27 cm deep). On the far western side of Area A, the



Fig. 1. Area A, unfinished dovetail holes.

dovetail holes are smaller and square shaped (20 × 20 cm, 20 cm deep) and more symmetrically arranged. The lowest course of triangular niches on the northern side of Pillar 3 contains outlines of unfinished dovetail holes (Fig. 1). The distance from the lowest niche to the floor is 2.8 m. Varro (*RR* 3.8.1) mentions that the lowest course of niches in a columbarium should be approximately one meter above the ground to prevent predators from gaining access to the birds or their eggs.

Area B

Area B is located in the northeastern corner of the room, delineated on the west by Pillar 1 (P1) and on the south by the remains of a curved bedrock wall that extended outward from the eastern wall (Plan 2); south of this bedrock protrusion begins Area A. Three openings from the surface pierce the ceiling of Area B: two roundish shafts at the northern end and one adjacent to the eastern wall. The two northern shafts were blocked. On the northern and eastern walls are five courses of large, rectangular niches below which are four

courses of triangular niches, similar in size to those of Area A (Fig. 2; Plan 2: Section 1–1). On the western side of the area, the pillars contain small square niches similar to those described above in Area A. The lowest row of niches in Area B is 1.8 m above the floor.

Area C

In this area, in the northwestern corner of the room, a bench (0.3 m wide, 1.1 m high) runs along the northern and western walls, and continues on the southern and western sides of P1 and the western side of P2 (L15; Plan 2). Shallow troughs, approximately 0.2 m square and a few centimeters deep, were hewn along the entire surface of the bench (Fig. 3). Three steps descend from Area B to Area C between P1 and P2 (L16; Plan 2: Section 3–3). The bedrock floor of Area C was hewn with shallow indentations approximately 0.13 m deep. Ten courses of triangular dovetail holes line the walls, approximately the same size as those in Areas A and B. A few are enclosed by a carved frame. The lowest dovetail hole is c. 1.8 m above the floor.



Fig. 2. Area B, different-shaped dovescotes on northern wall.



Fig. 3. Area C, benches and troughs.

Area D

To the east of the columbarium is an additional room (12.3×5.6 m), which is connected to the western room by a hewn tunnel (L11; 0.72 m wide, 2.01 m long, 1.4 m high; Plan 2). Area D is accessed from the surface by a staircase with a banister (E), descending from north to south, consisting of seven upper stairs carved in the

nari layer, and fifteen lower stairs hewn into the chalk bedrock. The stairs originally led down to a rounded room (diam. c. 4.5 m), bounded on the south by a pillar and a built wall (L3; Plan 2). South of the staircase is the entrance to the tunnel that leads west to Area A. The southern portion of the room extends another 3.5 m to the south (L14).

THE CONSTRUCTION PHASES

Phase 1

The original access into SC147 from the surface was via the three vertical shafts on the northern and eastern sides of Area B, which were hewn through the upper *nari* layer. The chalk bedrock beneath the *nari* was quarried and removed through these three openings, to create a rounded room (Area B). Remnants of the bedrock wall that originally delineated this room on the south protrude from the eastern wall (Plan 2).

To the south of Area B was a separate cave, Area A, with two central pillars (P2, P3) and two legs extending southward. The entrance to this cave was from Staircase F. It seems that Areas A and B were initially hewn, like most subterranean rooms at Maresha, as quarries to supply building material for the dwellings on the surface. At this time, the northern portion of Area D was created, which functioned independently of Areas A and B.

Phase 2

During this phase, the bedrock wall separating Areas A and B was hewn through, and the two caves were combined into one large columbarium, with niches hewn into the upper walls. A stub of the original partition wall remains on the eastern side of Area B. The large oval opening in the ceiling of Area A facilitated this work. The dove-cote niches are mainly large, asymmetric and roughly hewn, square or rectangular in shape. There are approximately five irregular courses of such niches in both areas. The vertical shafts in the ceiling enabled the pigeons to enter and exit the columbarium.

Phase 3

During this phase, the floor was deepened in Areas A and B, leaving the southern Staircase F 2.3 m above the floor and therefore rendering it useless. A small, narrow channel was constructed on the southern side of the staircase

that continued into the room. It may have been constructed to direct water from the dwelling above into the chamber. While this room does not contain any characteristics of a cistern, the existence of a channel corresponds well with Varro's description concerning the raising of doves: "Provision should be made for water to flow in [into a columbarium], so that they [pigeons] may have a place to drink and bathe (Varro, *RR* 3.7.5).

In this phase, the bedrock to the west of Area B was quarried to create another chamber, Area C. On the northwestern floor of Area B, the outline of the original wall is visible, leaving P1 and P2 to support the ceiling. An opening was made in the narrow wall between P2 and P3 (Plan 2: Section 1–1). Triangular niches were cut in the walls of Area C and in P1, P2 and P3, and similar niches were added beneath the rectangular niches in both Areas A and B (Plan 2: Sections 1–1, 3–3; Fig. 2). A row of triangular niches was left unfinished on the northern side of P3 at this time (Fig. 1).

In Area C, a bench was created around the northern and western walls and along P1 and P2 (Plan 2: Section 3–3; Fig. 3). The benches contain small, shallow, trough-like indentations that may have functioned as feeding troughs for the doves. Varro mentions that "food is furnished them [pigeons] in troughs running along the walls..." (*RR* 3.7:8). The floor of Area C was further deepened and three steps with shallow signs of quarrying were hewn between P1 and P2, leading down from Area B to the lowered floor. Smaller, square niches were now added in different places in the columbarium, primarily on the eastern sides of P1 and P2 and in the southwestern leg of Area A. At this stage, Area D was enlarged to the south and a passage was cut from the western wall of Area D to provide access to the columbarium. This would have allowed for easier access to the guano. The collection of pigeon droppings for fertilizer is mentioned in many of the ancient sources as being one of the important functions of the columbarium. Varro states that "the pigeon keeper should sweep them out frequently every

month; for the droppings... are well suited for fertilizing..." (*RR* 3.7:5).

The columbarium was eventually put out of use by the deliberate dumping of chalk building blocks and anthropogenic debris from the surface. The level of this debris almost reached the ceiling (L2; Plan 2: Section 1–1).

THE FINDS

The majority of the excavated subterranean complexes at Maresha were found to contain large quantities of anthropogenic debris. Our excavations over the years (Kloner et al. 2010:31–32) indicate that the caves were filled in a number of ways: as refuse dumps from surface dwellings, alluvium from the surface that flowed in over the centuries and/or debris that was purposely dumped inside to render the caves useless. This lack of stratigraphy between the upper and lower levels of the fill deposited in the cave, and the large ceramic corpus recovered within it, while typologically significant, adds little to the present discussion. As this debris originated in the living quarters above, the finds have no significant bearing on the use and development of the subterranean complex. The chronological range of the finds begins in Iron Age II and continues through the Hellenistic period. The vast majority of the finds are from the Hellenistic period, mainly from the second century BCE, while the Iron Age and Persian period material is marginal.

Among the finds were 66 terracotta figurines, most of them dated to the late Hellenistic period, with a few from Iron Age II, the Persian and early Hellenistic periods. Included in this diverse collection of figurines are six Greek and four Egyptian deities (Erlich and Kloner 2008:92–95). The 582 oil lamps from the fill include 469 wheel-made, 82 mold-made and 31 oil lamps on kernoï, the latter a vessel unique to Maresha that probably had a ritual function (Ambar-Armon, Kloner and Stern 2010:136). The majority of the lamps date to the Hellenistic period (83%), most of them categorized as 'Shefelah' lamps (Ambar-Armon 2007:196),

while the remainder date to Iron Age II or the Persian period.

The epigraphic material from SC 147 (Kloner et al. 2010) includes 1 Hebrew, 10 Aramaic and 36 Greek ostraca, as well as two altars and three astragali with Greek inscriptions, and three lead weights (bearing markings of a Macedonian shield). The Aramaic ostraca, dated paleographically to the Persian and early Hellenistic periods, provide valuable insights into the ethnic make-up of Maresha and the economy of the city during these periods. The Hebrew ostrakon dates from the seventh century BCE and testifies to the continuity of settlement at Maresha following the campaign of Sennacherib in 701 BCE (Eshel 2010:36–38). The Greek ostraca comprise mostly sherds with a single word or letter on them, as well as two abecedaries. In addition, 201 stamped amphora handles were discovered and will be published in the future.³

The numismatic material consists of 70 coins (Barkay, pers. comm.): 6 Ptolemaic (c. early to mid-third century BCE), 61 Seleucid, 2 city coins from Ascalon (end of the second century BCE) and 1 unidentifiable. The majority of the coins (52) are of Antiochus III (c. 198 BCE) and nine are of Antiochus IV (175–164 BCE).

The epigraphic and numismatic finds, as well as the oil lamps, are the main sources for dating the complex, and these have been published elsewhere. Therefore, we present here only a small assemblage of representative ceramic vessels. The ceramic material illustrated in Fig. 4 consists of selected diagnostic pieces that reflect the chronological range of the pottery from the fill, and the comparisons are drawn primarily from published material from Maresha Subterranean Complexes 21 and 70 (Levine 2003). The vast majority of the finds are Hellenistic and can be dated to the second century BCE, which corresponds well with the dating of the other finds.

The diagnostic pottery includes a West Slope Technique plate, probably from an eastern production center such as Pergamum, Tarsus or Antioch (Fig. 4:1), undecorated rolled-rim

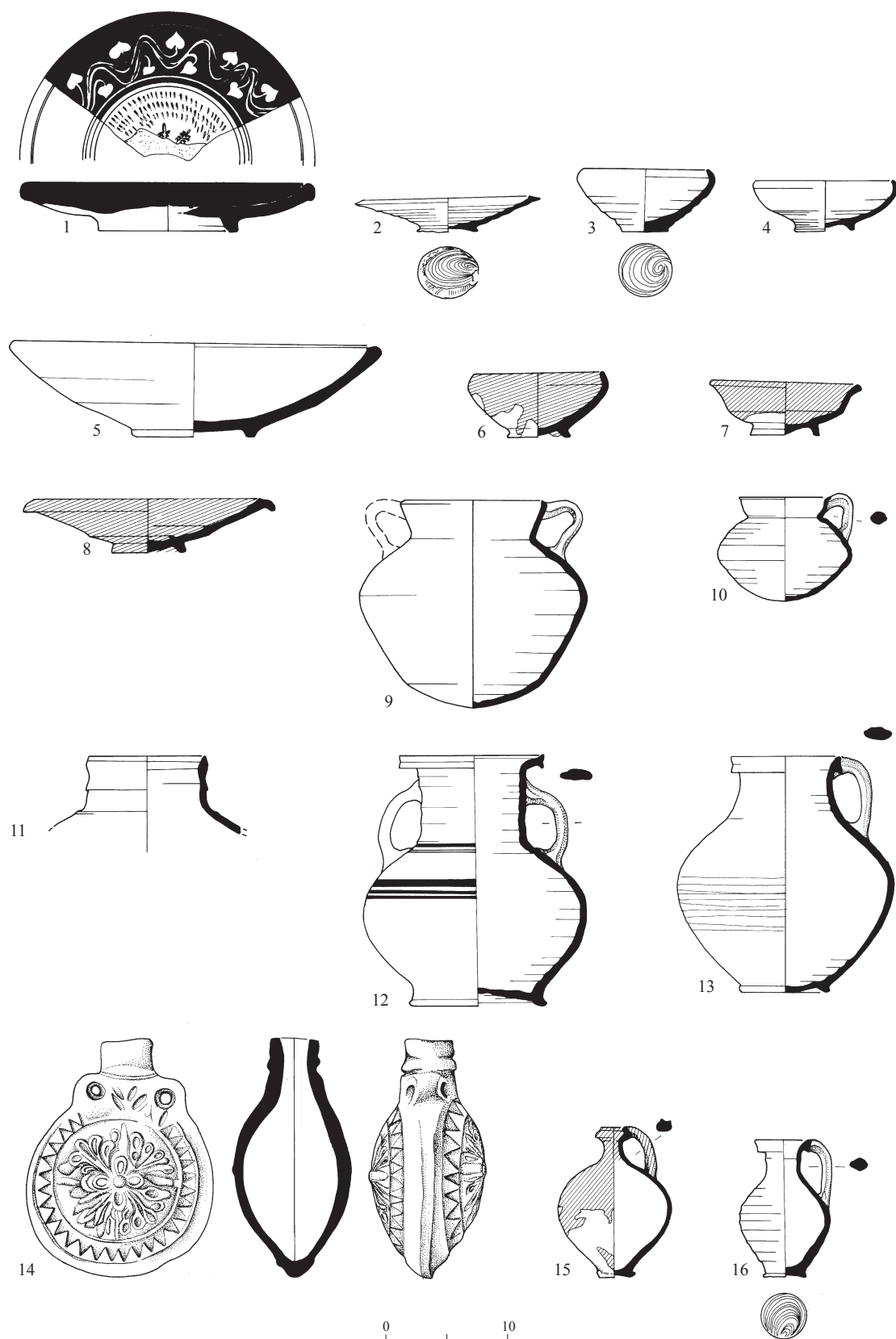


Fig. 4. Selected pottery from the fill of the cave.

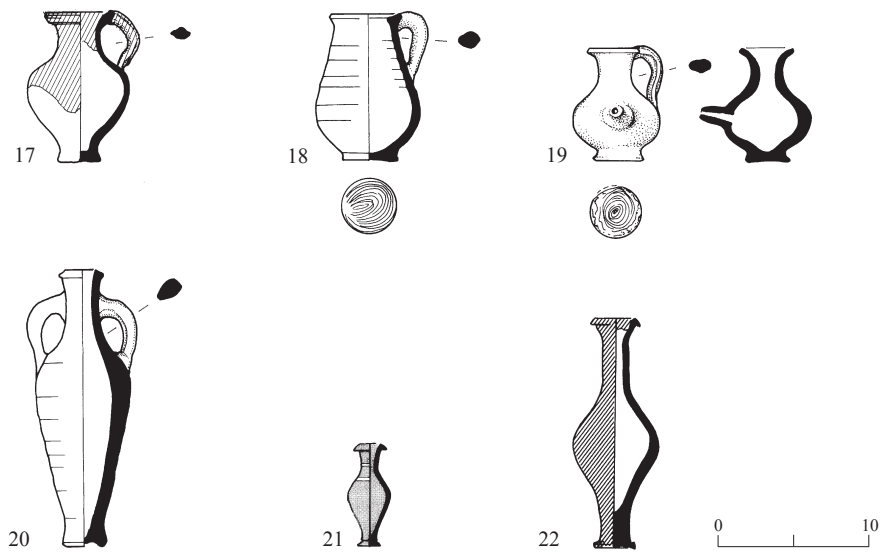


Fig. 4. (cont.).

No.	Vessel	Locus	Reg. No.	Description (measurements in cm) and Date (BCE)	Parallels
1	Plate	7	B1280Sp4	West Slope Technique; light red clay, dark reddish brown slip; H 3.9, base D 11, rim D 23.2; 2nd c.	Rosenthal-Heginbottom 1995:222, 225–226, Fig. 5.9:11, 12
2	Bowl	7	1134Sp1	Undecorated, rolled-rim saucer with disk base; reddish yellow clay; H 2.3, base D 4.6, rim D 15; late 2nd c.	Levine 2003:83, No. 29
3	Bowl	7	762Sp2	Undecorated, incurved rim, disk base; light gray clay; H 5, base D 4.4, rim D 10.4; 3rd–2nd c.	Levine 2003:84, No. 37
4	Bowl	8	1835Sp1	Undecorated, incurved rim, ring foot; very pale brown clay; H 4.3, base D 4.7, rim D 10.6; late 2nd c.	Levine 2003:84, No. 36
5	Bowl	8	1839Sp1	Undecorated, incurved rim, ring foot; light reddish brown clay; H 7.2, base D 10.8, rim D 31; late 2nd c.	Levine 2003:84, No. 27
6	Bowl	2	427Sp1	Decorated, incurved rim, ring foot; reddish yellow clay, reddish brown slip; H 5.4, base D 4.7, rim D 10.6; late 2nd–mid-1st c.	Bliss and Macalister 1902:126, Pl. 60:30–35 Levine 2003:84, No. 37
7	Bowl	9	1930	Outcurved, carinated; yellow clay, reddish brown slip; H 4.4, base D 5.8, rim D 12.4; 2nd c.	Levine 2003:83, No. 30
8	Bowl	7	805Sp1	Fishplate; light reddish brown clay, red/brown slip; H 4.7, base D 5.7, rim D 20.8; late 2nd c.	Levine 2003:86, Nos. 47, 49
9	Cooking Pot	2	455	Globular cooking pot; dark red clay; H 17, rim D 12, max. D 18.7; 3rd–2nd c.	Guz-Zilberstein 1995:298, Fig. 6:17:2, 3
10	Cooking Pot	10	2383Sp1	Small, squat, angular cooking pot; pale brown clay; H 8.8, rim D 7.4, max. D 10.7; 3rd–late 2nd c.	Levine 2003:94, No. 72
11	Jar	2	226	Angular shoulder, ovoid body, short neck; light red clay interior, pale brown clay ext.; preserved H 6, rim D 10; late 2nd c.	Kloner and Hess 1985: 130, Fig. 4:6 Levine 2003:95, No. 81

◄ Fig. 4. (cont.)

No.	Vessel	Locus	Reg. No.	Description (measurements in cm) and Date (BCE)	Parallels
12	Table amphora	10	2671Sp1	Light reddish yellow clay, two reddish brown bands; H 20.7, base D 11, rim D 12.1, max. D 17 cm; late 2nd c.	Levine 2003:99, No. 87
13	Jug	10	2373Sp2	Biconical with squared rim; pale gray clay; H 19.7, base D 7.3, rim D 9.5, max. D 17.2; end of 2nd c.	Levine 2003:103–104, No. 107
14	Mold-made flask	9	1925Sp1	Grayish yellow clay, dark gray slip; H 8.1, rim D 1.6, max. D 6.8; 2nd c.	Myśliwiec and Abu Senna 1995:205–222, Fig. 8
15	Juglet	13	2722Sp1	Cup mouth, disk base; reddish yellow clay, red-brown slip; H 12.3, base D 2.9, rim D 2.9, max. D 9; 2nd c.	Levine 2003:109, No. 127
16	Juglet	2	455Sp1	Pear-shaped with out-turned rim; light green clay; H 11.2, base D 3.4, rim D 4.6, max. D 7.4; late 2nd c.	Levine 2003:109–110, Nos. 130, 131
17	Juglet	10	2634Sp1	Pear-shaped with out-turned rim; pink clay, red slip; H 9.9, base D 2.6, rim D 4.6, max D 6.7; late 2nd c.	Levine 2003:109–110, No. 132
18	Juglet	2	417Sp2	Maresha juglet; light green clay; H 9.6, base D 3.8, rim D 4.6, max. D 7.1; 2nd c.	Levine 2003:112, Nos. 136, 137
19	Juglet	7	820Sp1	Feeder juglet; reddish-brown clay; H 7.4, base D 3.4, rim D 3.6, max. D 5.8; late 2nd c.	Bliss and Macalister 1902:126, Pl. 60:22 Levine 2003:112, No. 140
20	Amphoriskos	11	2401Sp1	Phoenician semi-fine ware; light yellow clay; H 18.5, base D 2.8, rim D 3.2, max. D 6.3; late 2nd c.	Guz-Zilberstein 1995:308, Fig. 6.29:6
21	Unguentarium	2	102Sp1	Athenian gray fusiform, miniature; dark gray clay, two white bands; H 6.8, base D 1.6, rim D 2, max. D 2.8; end of 3rd c.	Guz-Zilberstein 1995:306, Fig. 6.27:1–4 Levine 2003:113, No. 144
22	Unguentarium	5	309Sp1	Slipped fusiform, reddish yellow clay, brownish red slip; H 15.2, base D 2.9, rim D 3.5, max. D 5.6	Levine 2003:114, No. 146

saucers (Fig. 4:2, 3), incurved-rim bowls (Figs. 4:4–6), an outcurved, carinated bowl (Fig. 4:7), a fishplate (Fig. 4:8), a globular cooking pot (Fig. 4:9), a small angular cooking pot (Fig. 4:10), a diagnostic sherd of a jar (Fig. 4:11), a table amphora (Fig. 4:12), a jug (Fig. 4:13), a decorated mold-made flask (Fig. 4:14), juglets (Fig. 4:15–18), a feeder juglet (Fig. 4:19), an amphoriskos (Fig. 4:20) and unguentaria (Fig. 4:21, 22).

CONCLUSIONS

The relatively large number of columbaria within the subterranean complexes at Maresha, their architectural design and the vast space

they cover, indicate that these chambers had an important function in the lifestyle of the local population in the Judean Shephelah in general, and at Maresha in particular. The pigeons were a source of food (meat and eggs), they had a cultic purpose as sacrificial animals, and their droppings were used as fertilizer. All of this is testified to in various ancient (albeit slightly later) sources, such as Varro (*RR* 3.7.1–7; 8; 11), Columella (*RR* II, VII, VIII:3–5), the Mishna (Baba Batra 4:7, 9; 5:3) and Tosefta (Berakhot 4:14). Certain architectural elements, mentioned in some of the sources, but not found in most of the other excavated columbaria of Maresha, were discovered within SC 147. These include a narrow channel (next to Staircase F) to direct

water into the cave, as well as shallow ‘feeding’ troughs carved into raised benches along some of the walls. The entrance tunnel from Area D was created for easy access to the floor of the columbarium from which the bird droppings were gathered.

The architectural remains revealed in SC 147 indicate a long period of use, renovation and alteration. The ceramic remains are primarily from the second century BCE, and the lack of stratigraphy does not allow for a more precise chronology. Epigraphic finds from Egypt mention the existence of columbaria there already in the Hellenistic period (Zissu 1995:65), and it is our opinion that the earliest columbaria at Maresha were built during the period of Ptolemaic rule, representing further evidence of Ptolemaic influence at Maresha.

A general constructional sequence has been noted in SC 147. The earliest stage of the columbarium contained large, roughly hewn, rectangular niches located in the upper walls of Areas A and B. They are similar in size and shape, but not identical, to the dove-cotes discovered in SC 21 (Kloner 2003:43–45), SC 30, SC 61, System 18 and Room A19 (personal observation). In the next stage, triangular niches were added, represented by those in the lower rows in Areas A and B, as well as all those in Area C, which, as noted above, was the latest major alteration in the complex. Remnants of unfinished triangular niches in the lower rows strengthens this supposition. Finally, beneath some of these triangular niches, a limited number of small

square niches were hewn. At a later stage, the columbarium was deliberately filled with debris from the surface, which included a large quantity of building stones, apparently from the dwellings above.

Kloner notes that Maresha had the largest number of columbaria for the raising of doves in the Levant, totaling at least 50,000 niches (Kloner et al. 2010:213). From the third to the beginning of the second centuries BCE, Maresha supplied doves over an area that spanned from the southern Shephelah to Jerusalem. Furthermore, he states that while most of Maresha’s columbaria went out of use by the first half of the second century BCE, columbaria continued to be built and used in other parts of the country, including 44 in the Jerusalem area alone. Most of these date to the Hasmonean and Herodian periods.

While the lack of stratigraphy in SC 147 precludes a specific chronology, a number of historical sources speak of enmity between the Idumeans and the Judeans at the end of the first third of the second century BCE (1 Maccabees 5:65–68; Josephus, *Antiquities* 12:353–353). It may be that friction between these two peoples led to a cessation in trade, including that of doves, which in turn resulted in the filling/closing of some of the Maresha columbaria, including SC 147 (some would still have been needed for local needs, as well as non-Jerusalem markets, such as Ashqelon). This may have been the catalyst for the construction of so many new columbaria in the Jerusalem area at that time (Kloner et al. 2010:213).

NOTES

¹ The excavation was conducted by Bernie Alpert, Ian Stern and Amos Kloner on behalf of the Israel Antiquities Authority (Licence Nos. G-9/93, G-11/94, G-35/95, G-17/96, G-5/97, G-9/98, G-8/99, G-3/00). The plans and drawings were prepared by Silvie Yogeve, and the processing and registration of the finds was carried out by Sonia Shaharit and Ludmilla Yaborski.

² It should be noted that the orientation of SC 147 on the previously published schematic plan of the site is erroneously presented on an east–west axis. This was corrected on Plan 1 where SC147 is oriented north–south.

³ These are being processed by Gerald Finkielsztejn.

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