

**The Archaeology
of the
Early Islamic Settlement
in Palestine**

Jodi Magness

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*Dedicated
to the memory of*

JAMES A. SAUER

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Preface

It is a pleasure to thank the individuals and institutions whose support made this project possible. I carried out most of the research for this book and wrote a rough draft of the manuscript in 1997–98, when I was awarded a fellowship from the American Council of Learned Societies and a fellowship in Byzantine Studies at Dumbarton Oaks in Washington, D.C. By December 1999, I had completed the final draft of the manuscript. My research was greatly facilitated by access to the library holdings at Dumbarton Oaks and by the assistance of the librarian, Mark Zapatka. I benefited from stimulating discussions with many of the fellows and staff at Dumbarton Oaks, including Eduardo Douglas, Sharon Gerstel, Todd Hickey, Michael McCormick, and Stephen Zwirn. I am especially grateful to Kenneth G. Holum, a close friend and colleague, who was a fellow at Dumbarton Oaks in 1997–98. Ken provided invaluable feedback and advice as my research progressed. I would also like to thank the following scholars in the U.S. and Europe for their advice on this project: Robin M. Brown, J. P. Dessel, S. Thomas Parker, Leonard V. Rutgers, and Donald Whitcomb.

Many of my Israeli friends and colleagues provided invaluable assistance, advice, and information relating to this project. They include Mordechai (Moti) Haiman, Gideon Avni (who took me to visit the early Islamic site at Sde Boqer), Peter Fabian (who shared information with me on his excavations at various sites in Be'er-sheva' and the Negev), Uzi Avner, Yuval Barouch (who took me to visit his excavations at Khirbet Susiya and other sites in the southern Hebron Mountains), and David Amit. I am also grateful to Hanan Eshel and Eli Shenhav, who invited me to co-direct the excavations at Khirbet Yattir. Although I cannot name them all individually, I would like to acknowledge the assistance of many other colleagues at the Israel Antiquities Authority, the Hebrew University of Jerusalem, and the W. F. Albright Institute of Archaeological Research in Jerusalem.

I could not have carried out this project without the support of the administration at Tufts University and my former colleagues in the Departments of Classics and Art History, especially Peter Reid and Steve Hirsch. I am also grateful for the selfless love and patience of my husband, Jim Haberman, who never complains about the long hours I spend at the office and my extended summer trips to the Mediterranean.

I am dedicating this volume to the memory of my dissertation advisor, James A. Sauer, who passed away on 23 November 1999 after a prolonged illness. When I was a graduate student, Jim challenged me to examine the evidence for the dating of early Islamic pottery in Palestine. This book is one outcome of that challenge. It is therefore a tribute to Jim, who supported me for as long as he could by providing advice, letters of recommendation, and friendship.

CHAPTER 1

Introduction

The picture obtained from the archaeological remains is that the period of great crisis was the Abbasid period, that is, the middle of the eighth century. Certainly the collapse of settlement did not occur during the Umayyad period (ca. 640–750), although the processes of decline can already be discerned at that time. . . . The picture that I see is one of decline beginning with the Muslim conquest.¹

A review of archaeological research of the Abbasid period in Jordan presents an opportunity to correct two historical misconceptions. The first is that the transfer of the political center eastward with the rise of the Abbasids and development of Baghdad made Jordan a stagnant backwater so that from 750 A.D. there was a drastic decline in population and urban settlement lasting through the Abbasid period.²

There is a common perception that the Muslim conquest of Palestine in the seventh century caused a decline in the number and prosperity of settlements throughout the country.³ The role played by archaeology in perpetuating this view is particularly insidious, because it is perceived, rightly or wrongly, as providing “scientific” (and therefore “objective”) data. Thus, archaeological evidence is frequently cited by scholars as proof or confirmation that Palestine declined after the Muslim conquest, and especially after the rise of the Abbasids in the mid-eighth century.⁴

Ceramic evidence has often been used by archaeologists to support this idea of a decline after the Muslim conquest. In earlier studies, I discovered that this was due in large part to the misdating of the local pottery types of the Byzantine and early Islamic periods.⁵ Roughly speaking, ninth-century ceramic types

1. My translation from the Hebrew: Y. Tsafir, “The Arab Conquest and the Gradual Decline of the Population of Eretz Israel,” *Cathedra* 32 (1984) 70–71 (in Hebrew).

2. D. Whitcomb, “Archaeology of the Abbasid Period: The Example of Jordan,” *Archéologie islamique* 1 (1990) 75.

3. See N. A. Silberman, “Desolation and Restoration: The Impact of a Biblical Concept on Near Eastern Archaeology,” *Biblical Archaeologist* 54 (1991) 76–87.

4. For recent discussions, see Whitcomb, “Archaeology of the Abbasid Period,” and idem, “Hesban, Amman, and Abbasid Archaeology in Jordan,” in L. E. Stager, J. A. Greene, and M. D. Coogan (eds.), *The Archaeology of Jordan and Beyond: Essays in Honor of James A. Sauer* (Studies in the Archaeology and History of the Levant 1; Winona Lake, Ind.: Eisenbrauns, 2000) 505–15.

5. J. Magness, *Jerusalem Ceramic Chronology circa 200–800 C.E.* (henceforth referred to as *JCC*; Sheffield: Sheffield Academic Press, 1993); also see Whitcomb, “Archaeology of the Abbasid period”; idem, “Khirbet al-Mafjar Reconsidered: The Ceramic Evidence,” *Bulletin of the American Schools of Oriental Research* 271 (1988) 51–67. The misdating of early Islamic ceramic types by Israeli archaeologists stems largely from M. Rosen-Ayalon and

had been dated by archaeologists to the eighth (and sometimes even seventh) century, eighth-century types had been assigned to the seventh (and even sixth) century, and so on. In other words, there was a tendency to date the local pottery types too early. This left a gap in the later periods, especially in the eighth to ninth centuries. As will be seen in this study, the correct dating of local ceramic types reveals the existence of previously “invisible” remains of the late Umayyad and Abbasid periods. The ceramic chronology is supported by other kinds of evidence, such as coins and inscriptions. In this study, I have relied almost entirely on archaeological evidence instead of on historical sources. This is because my training and expertise are in archaeology, whereas many better-qualified scholars than I have evaluated the historical sources for the Muslim conquest of Palestine. In addition, the historical sources have their own biases, and can be manipulated by modern scholars in much the same way as the archaeological evidence, to support different views or interpretations.⁶

I first conceived of this project while working on my Ph.D. dissertation. About a decade has passed since then, and the result is a book that is consciously and deliberately archaeological, data-laden, and somewhat technical. This is because in my opinion, the archaeological evidence *must* constitute the basis for any reconstruction (archaeological and/or historical) of the Byzantine to early Islamic transition in Palestine. In this volume, I attempt to present the archaeological evidence as accurately as possible. Because pottery constitutes the most commonly recovered category of artifact, and is an important (and often the only) means of dating archaeological remains, much of the discussion is devoted to ceramic analysis. Although archaeological evidence can be considered “hard” data, the dating and interpretation of this evidence are often problematic and controversial. The archaeological evidence presented in this study indicates that the early Islamic settlement in Palestine was a complex process that does not fit any of the interpretive models that have been proposed to date.

The Models for the Israelite and Muslim Conquests

The manner in which scholars have interpreted the Muslim conquest and settlement of Palestine has in many ways paralleled the evolution of a much better known debate: that surrounding the conquest and settlement of Canaan by the Israelite tribes at the end of the Bronze Age and beginning of the Iron Age (ca. 1200 B.C.E.). The parallels are striking: hordes of invading tribesmen conquer and replace an established, prosperous civilization, symbolizing the victory of the desert over the sown. In both cases, a dramatic decline in the level of prosperity and material culture, as well as a drop in population, have been understood

A. Eitan’s unpublished 1965 excavations at Ramla, where splash-glazed pottery, buff (“Mefjer”) ware, and zoomorphic figurines were reported from levels supposedly dating to the first half of the eighth century; see J. Magness, “The Dating of the Black Ceramic Bowl with a Depiction of the Torah Shrine from Nabratein,” *Levant* 26 (1994) 204–5 n. 3; M. Rosen-Ayalon and A. Eitan, *Ramla Excavations* (Jerusalem: Israel Museum, 1971). The results of recent excavations at Ramla support my suggestion that this material comes from levels dating to the Abbasid period, and that Islamic glazed wares were not introduced to Palestine before the 9c; see K. Cytryn-Silverman, “The Ceramic Finds from the 1996 Excavations North of the White Mosque in Ramla,” in S. Gibson and F. Vitto (eds.), *Ramla: The Development of a Town from the Early Islamic to Ottoman Periods, One-Day Conference, 25th March 1999* (Jerusalem: Internal Publication of the Israel Antiquities Authority, 1999) 38–42. I am grateful to Katia Cytryn-Silverman for sharing this information with me.

6. Compare, for example, the different interpretations of the nature of early Islam and the Muslim conquests presented by F. McGraw Donner, *The Early Islamic Conquests* (Princeton: Princeton University Press, 1981); M. Gil, *A History of Palestine, 634–1009* (Cambridge: Cambridge University Press, 1992); and P. Crone and M. Cook, *Hagarism* (Cambridge: Cambridge University Press, 1977).

as following the conquests. The models interpreting these conquests have also developed in a somewhat parallel manner.⁷

The Unified Conquest Model. This model was developed largely by W. F. Albright and Y. Yadin (the “Albright School”), who attributed the thick destruction levels covering Late Bronze Age levels in Canaanite cities such as Hazor to the Israelite tribes. They viewed the presence of poor squatters’ hovels and silos built in the ruins of these cities as evidence for the triumph of primitive semi-nomads over city dwellers. New archaeological discoveries and the refinement of the ceramic chronology have undermined the widespread acceptance of this model for the Israelite conquest. However, many scholars, especially those in Israel, still associate widespread destructions with the Muslim conquest (or with the slightly earlier Sassanid Persian invasion).

The Peaceful Infiltration Model. In the 1920s, A. Alt and M. Noth (representing the “Alt School”), suggested that the Israelite settlement of Canaan was the result of peaceful infiltration, not a unified military campaign. They cited ancient reports describing the activities of a rebellious group called ‘*apiru* (whom they identified as “Hebrews”) on the frontiers of the settled land. The parallels between modern scholarly interpretations of the ‘*apiru* and the Saracens mentioned in Roman sources are striking. The fourteenth-century B.C.E. Amarna letters seem to indicate that the ‘*apiru* were present in Canaan and hostile to the Canaanite rulers more than a century before the Israelite conquest. Alt and Noth described them as pastoral nomads who slowly filtered into the settled land from the desert and after a long period of uneasy co-existence with the Canaanite population, overran and destroyed the Canaanite city-states. This model is based on the assumption that throughout antiquity the deserts of the Near East contained hoards of nomads who periodically invaded and ravaged the settled areas (the conflict between “the desert and the sown”). However, scholars have since recognized that a symbiotic relationship has always existed between pastoralist and agriculturalist populations on the desert fringes. The distinction is not between populations of settled farmers and wandering pastoralists, but between peasants who tended animals and peasants who tended crops. Although this model (at least in this form) has lost most of its following among scholars studying the Israelite conquest, the idea that Saracens or other nomadic (Arab) populations infiltrated the settled border areas of Syria–Palestine and contributed to the weakening of Byzantine control is still popular among many scholars.

Peasant Revolt Model. In the 1960s, G. Mendenhall proposed that the Israelite conquest was not a conflict between nomads and a settled population but between the rural population and the rulers of the city-states (this model was elaborated upon by N. K. Gottwald). Mendenhall argued that the ‘*apiru*, who lay outside the highly stratified society of Late Bronze Age Canaan, threatened the social order by encouraging the peasants to rebel. He also suggested that the ‘*apiru* and their peasant supporters were unified and inspired by a religious ideology revolving around the worship of a single, transcendent god—Yahweh. Instead of relying on a pantheon of deities and elaborate fertility rituals that could be performed only by the king and his official priesthood, the new religious movement placed its faith in a single god who established egalitarian laws of social conduct and communicated directly with each member of the community. For Mendenhall, the true Israelite conquest was accomplished when large numbers of Canaanite peasants overthrew their masters and became “Israelites.” Although to my knowledge this model has never been systematically applied to the Muslim conquest, it has a counterpart in the popular belief that Islam was the unifying factor that enabled the Arab tribes to defeat the Byzantine armies and conquer vast territories.

7. The literature on the Israelite conquest and settlement of Palestine is vast, and a full review with references lies outside the scope of this discussion. For the following summary of the Israelite conquest and settlement models, with bibliography, see E. Bloch-Smith and B. A. Nakhai, “A Landscape Comes to Life: The Iron Age I,” *Near Eastern Archaeology* 62 (1999) 62–92, 101–27; N. A. Silberman, “Who Were the Israelites?” *Archaeology* 45 (1992) 22–30; P. McNutt, *Reconstructing the Society of Ancient Israel* (Louisville: Westminster John Knox, 1999) 53–63.

The “peasant revolt” model never gained broad support among scholars, and faded together with the national liberation movements of the 1960s and 1970s.

The Shifting Population Model. More recently, I. Finkelstein proposed that the phenomenon of Israelite settlement should be understood in light of cyclical processes of sedentarization and abandonment that occurred in the southern Levant throughout the third and second millennia B.C.E.⁸ This model is explicitly influenced by the currently fashionable Braudelian idea of studying long-term historical developments (“la longue durée”).⁹ Archaeological surveys have indicated that the hill country of Canaan was thickly settled in the period beginning around 1750 B.C.E., and that around 1550 B.C.E., the settled population in the hill country declined dramatically. During the Late Bronze Age (ca. 1550–1200 B.C.E.), while the large cities continued to flourish, most of the permanent settlements in the hill country were abandoned, and others shrank in size. According to Finkelstein, population pressure and competition for scarce agricultural resources caused a large part of the hill population during this period to adopt a pastoralist lifestyle. With the collapse of the Late Bronze Age kingdoms ca. 1250–1200 B.C.E., the markets in the cities where the pastoralists had traded sheep and goats for grain disappeared. To support themselves, the pastoralists became farmers again, and in the process were transformed into early “Israelites.” This model was recently (though not explicitly) applied by G. Avni to the Muslim conquest. Based on his survey of parts of the Negev (see my chapter on the central Negev below), Avni has suggested that the expansion of the farms to the south during the seventh and eighth centuries resulted from the decline of the towns. As the towns declined, the nomadic tribes of the Negev were forced to diversify their economic base by adopting intensive runoff agriculture and by abandoning long-range migration in favor of short-range transhumance. I believe that Avni’s suggestion is based on two flawed assumptions: (1) that the Negev towns declined during the seventh century; (2) that the decline of the Negev towns caused the nomads to lose their main economic base, forcing them to settle down and begin farming to support themselves. The evidence reviewed later in this study points to the opposite conclusion: that the peripheral lands of the northern and central Negev were settled in periods when the towns flourished and there was a strong central government, not when there was a weak government or a period of decline. In fact, nomadic populations tend to cluster around the periphery of towns and villages, following the borders of the settled land.¹⁰

The fact that the peripheral lands or frontier regions of Palestine were settled during periods of prosperity and a strong central government undermines Finkelstein’s hypothesis that the early “Israelites” were originally pastoralists in the hill country, who were compelled to become farmers when the Late Bronze Age kingdoms collapsed (and with them, the markets in the cities where they had traded sheep and goats for grain). S. Bunimovitz has made this same point. He noted that during the Late Bronze Age, when an increase in pastoralism in the hill country should be expected (according to Finkelstein’s hypothesis), the

8. See I. Finkelstein, *The Archaeology of the Israelite Settlement* (Jerusalem: Israel Exploration Society, 1988); idem, “The Emergence of Israel: A Phase in the Cyclic History of Canaan in the Third and Second Millennia BCE,” in I. Finkelstein and N. Na’aman (eds.), *From Nomadism to Monarchy: Archaeological and Historical Aspects of Early Israel* (Washington, D.C.: Biblical Archaeology Society, 1994) 150–78; idem, “The Great Transformation: The ‘Conquest’ of the Highlands Frontiers and the Rise of the Territorial States,” in T. E. Levy (ed.), *The Archaeology of Society in the Holy Land* (New York: Facts on File, 1995) 349–65; for other models that posit a symbiosis between agriculturalists and pastoralists, see Bloch-Smith and Nakhai, “A Landscape Comes to Life,” 68.

9. See F. Braudel, *The Mediterranean and the Mediterranean World in the Age of Phillip II* (London: Fontana/Collins, 1975); S. Bunimovitz, “Socio-Political Transformations in the Central Hill Country in the Late Bronze–Iron I Transition,” in I. Finkelstein and Na’aman, *From Nomadism to Monarchy*, 179–81; I. Finkelstein, “The Great Transformation,” 351.

10. For further discussion of this phenomenon, see my chapters on “Settlement Processes and Patterns of Land Use,” and “The Central Negev.”

evidence for such activity decreases dramatically.¹¹ This is because during this period the “shifting frontier” receded to the lowlands, where new opportunities had opened due to the collapse of the Middle Bronze Age urban systems.¹² According to Bunimovitz, the establishment of hundreds of small agricultural villages in the hill country (as well as in Galilee and the Negev) at the beginning of the Iron Age is connected with the strengthening of Egyptian control over Palestine during the Nineteenth and Twentieth Dynasties.¹³ Although a consideration of the history of Late Bronze and Early Iron Age Palestine lies beyond the scope of this discussion (and is outside my field of expertise), the “shifting frontiers” paradigm indicates that Bunimovitz is correct in seeking to explain the establishment of the hill country villages against the backdrop of strong government control.

Why Yattir?

Although I do not believe that Finkelstein’s model is valid for the Israelite or Muslim conquests of Palestine, this study is consciously inspired by his work on the Israelite settlement.¹⁴ Finkelstein’s archaeological evidence was drawn largely from his survey of Ephraim. For this study, I chose the survey material from the Yattir region for several reasons. First, I sought an area in the southern half of Palestine, where I am most familiar with the local pottery types. On the other hand, I preferred a region to the north of Be’er-sheva, since the marginal areas farther to the south could be viewed as unrepresentative of other parts of the country. However, I have largely excluded Jerusalem and its environs from this discussion, since that was the focus of my previous book.¹⁵ Second, because I did not intend to conduct my own survey, I required an area that was surveyed and published. The fact that the survey map of Yattir is published means that I had full and unrestricted access to the survey material (at least, the material that I was able to locate). The third reason I selected the Yattir region is that, at about the time I undertook this study, I was invited to co-direct excavations at the site of Khirbet Yattir, which lies just to the north of the area of Govrin’s survey map. This was fortuitous, because I believe that excavations must be used to supplement and control the information provided by surveys. Survey material can be misleading and can yield an inaccurate picture when used by itself, independently of excavation data. In addition, only one or more excavated sequences can provide the basis for the construction of a reliable local ceramic typology. Since the vast majority of surveyed sites are dated on the basis of small fragments of local coarse wares, the establishment of a ceramic typology is essential for the accurate reconstruction of settlement patterns in any region over long periods—“la longue durée.”

Problems of Survey Methodology

. . . the behavior of the archaeologist is the greatest source of variability in the archaeological record.¹⁶

. . . the nature of the survey dictates the nature of the conclusions.¹⁷

11. See Bunimovitz, “Socio-Political Transformations,” 194.

12. *Ibid.*, 199.

13. *Ibid.*, 195.

14. See I. Finkelstein, *The Archaeology of the Israelite Settlement*.

15. See Magness, *JCC*.

16. M. B. Schiffer, *Formation Processes of the Archaeological Record* (Albuquerque: University of New Mexico, 1987) 362.

17. S. A. Rosen, “Byzantine Nomadism in the Negev: Results from the Emergency Survey,” *Journal of Field Archaeology* 14 (1987) 31.

Archaeological surveys provide valuable though limited information. The limitations of survey include incomplete coverage, which leads to partial data and site retrieval; the material's lack of stratigraphic context; and the fluidity of interpretation, such as the periodization (chronological) definitions employed. Even the definition of a site is an act of interpretation.¹⁸ These limitations can be minimized through the employment of an explicit survey design and full publication of the hard data. However, few surveys in the Levant have been explicit about their field methods, especially the degree of coverage.¹⁹ This is true of Y. Govrin's survey of the southern Yattir region (Map 139), which constitutes the basis of this study. The publication provides no descriptions of the decisions that were made regarding the sampling scheme, intensity, or other strategies.²⁰ Although total coverage is implied, it apparently was not achieved. This is suggested by the total lack of references in the publication to nomadic camp sites or other sites with stone circles that represent the remains of tent bases, threshing floors, and burials or cemeteries. These kinds of sites are represented in more recently surveyed and published areas nearby.²¹ Govrin conducted his survey before Near Eastern archaeologists began to confront the problem of identifying the remains of pastoral or nomadic populations in the archaeological record.²² I assume that such populations were present in greater or lesser numbers, representing varying degrees of nomadism/pastoralism, in all periods. This is based on the presence of campsites in adjacent areas, the landscape and climate of the southern Yattir region, and modern ethnographic data.

Because I was not involved in the survey of the *Map of Nahal Yattir (139)*, my reevaluation of the data, which constitutes the basis of this study, cannot be considered completely accurate or definitive. The fact that I was unable to locate some of the survey material in the storerooms of the Israel Antiquities Authority in Jerusalem means that even the published sample presented here is incomplete. One of the positive features of Govrin's survey is its apparent lack of bias. All of the historical and prehistoric periods appear to be represented among the material that I examined in the storerooms, including non-ceramic objects such as stone tools, grinding implements, and even inscriptions on stone. The pottery included both diagnostic and undecorated body sherds. Thus, Govrin was not deliberately selective in his collection of material. In addition, Govrin's terminology reflects a great deal of restraint. For example, he defined many of the units he surveyed as "structures," instead of using more descriptive but potentially inaccurate terms. The same caution can be seen in his plans of some of the sites, compared with plans of the same sites published by M. Gichon on the basis of an earlier survey that he conducted, where lines of walls are indicated with continuous heavy black lines.²³ Thus, although Govrin's survey map (Map 139) is not complete or conclusive,

18. S. E. Alcock, J. F. Cherry, and J. L. Davis, "Intensive Survey, Agricultural Practice, and the Classical Landscape of Greece," in I. Morris (ed.), *Classical Greece: Ancient Histories and Modern Archaeologies* (Cambridge: Cambridge University Press, 1994) 138.

19. A. H. Joffe, *Settlement and Society in the Early Bronze Age I and II, Southern Levant: Complementarity and Contradiction in a Small-Scale Complex Society* (Sheffield: Sheffield Academic Press, 1993) 8.

20. Y. Govrin, *Archaeological Survey of Israel: Map of Nahal Yattir (139)* (Jerusalem: Israel Antiquities Authority, 1991).

21. For the kinds of remains associated with camp sites, see Rosen, "Byzantine Nomadism in the Negev." For an example of a more recent survey with recorded camp sites, see D. Gazit, *Archaeological Survey of Israel, Map of Urim (125)* (Jerusalem: Israel Antiquities Authority, 1996), especially 18*; also see the chapter on the central Negev below.

22. See E. B. Banning, "Highlands and Lowlands: Problems and Survey Frameworks for Rural Archaeology in the Near East," *Bulletin of the American Schools of Oriental Research* 301 (1996) 25–45; S. R. Simms, "The Archaeological Structure of a Bedouin Camp," *Journal of Archaeological Science* 15 (1988) 197–211; Rosen, "Byzantine Nomadism in the Negev."

23. Compare, for example, the plans of Tel Yeshua' and Tuwaiyil el Mahdhi provided by Govrin, *Map of Nahal Yattir*, 89, 62 and by M. Gichon, "The Sites of the Limes in the Negev," *Eretz-Israel* 12 (1975) 154 (in Hebrew).

I believe it is a fairly representative sample of the remains of permanent settlements and obtrusive or visible remains in the southern Yattir region. This assumption is reasonable because of the barren landscape, where little vegetation or ground cover obscures the more obtrusive remains.

Another problem I have encountered in my study of this survey material is that in many cases few if any diagnostic potsherds were collected. This means that it is often difficult to assign precise dates to the pottery gathered from these sites. If it is impossible to ascertain whether the pottery from any given site is Byzantine or early Islamic, then accurate historical conclusions regarding changes in settlement patterns during these periods cannot be drawn. On the other hand, the creation of maps showing site distribution and changes in settlement patterns leaves little or no room for such ambiguity. The colored dots that I have used to pinpoint sites in the Yattir region create a factual certainty that may not exist. They do not reflect the ambivalence I feel when trying to assign dates to certain sites based on the often meager and ambiguous ceramic evidence. Many of the sherds collected in surveys are not particularly diagnostic (that is, they are either body sherds or unfamiliar types of rims, handles, or bases). Even in cases where I could identify the sherds that I examined as Byzantine or early Islamic with some degree of probability, it is impossible to express the degree of probability on a map with dots. In addition, given the small number of diagnostic sherds from most sites, it is impossible to ascertain whether some periods are unrepresented in the sample collected. While it is true that such problems are inherent to surveys, they cannot be conveyed when using these data to create settlement maps. Once such maps are created, they create facts that serve as a frame of reference for future scholarship. Another problem is that even many diagnostic sherds cannot be closely dated. This is especially true of cooking wares and some storage jars, which are the most common types represented in the survey sample. S. A. Rosen noted that the pottery he collected at Negev campsites is defined in literature as "Byzantine" or "Roman/Byzantine," which represents a 500-year block of time whose chronological borders are difficult to establish.²⁴ Similarly, many of the sites surveyed by E. B. Banning are defined on the basis of the pottery as "Roman-Byzantine," and "Byzantine-Umayyad."²⁵ This lack of chronological resolution makes it difficult to generate accurate, period-specific settlement maps. These problems mean that future fieldwork in the southern Yattir region may modify the proportions or percentages or types of settlements as I have defined them in this study. It will, however, not change the fact that there is archaeological evidence for significant early Islamic presence and activity in the region.

I agree with those scholars who believe that "survey is not an end in itself, and survey material alone can never provide a secure basis for interpretations."²⁶ This is because, since no survey can provide truly full coverage, statistical and other data on site size, numbers and distributions are suspect.²⁷ Even if full coverage can be achieved, the nature of the material collected (such as the lack of stratigraphic context and imprecise chronological resolution) would call into question any definite conclusions.²⁸ Because of these problems, survey data can and should be used together with excavated data.²⁹ The excavations at Khirbet Yattir provided my frame of reference and control for this survey material. Excavations should be

24. Rosen, "Byzantine Nomadism in the Negev," 30.

25. Banning, "Highlands and Lowlands," 35.

26. Joffe, *Settlement and Society*, 20; E. B. Banning, "Peasants, Pastoralists, and *Pax Romana*: Mutualism in the Southern Highlands of Jordan," *Bulletin of the American Schools of Oriental Research* 261 (1986) 27, where he notes that, "The impracticability of total examination in almost every case makes some kind of sampling necessary." For a different view, see J. F. Cherry, "Frogs Round the Pond: Perspectives on Current Archaeological Survey Projects in the Mediterranean Area," in D. R. Keller and D. W. Rupp (eds.), *Archaeological Survey in the Mediterranean Area* (BAR International Series 155; Oxford: BAR, 1983) 375-409.

27. Joffe, *Settlement and Society*, 20.

28. Banning, "Peasants, Pastoralists, and *Pax Romana*," 27, noted that "total coverage," as reported, often does not coincide with the universe to which it is supposed to apply.

29. Joffe, *Settlement and Society*, 20.

an integral part of survey projects, since only excavations can provide the basis for a well-defined and closely-dated ceramic sequence. Because types vary from region to region, it is necessary to establish a ceramic typology and chronology for each surveyed area. Without excavation, the assignment of ceramic types to various periods, which constitutes the basis for the periodization of surveyed sites, has no validity. In other words, ceramic typologies, which provide the absolute chronologies for most surveyed sites, can only be established using excavated and stratified sequences, not survey material.³⁰

The excavation and survey material utilized in this study provides a basis for distinguishing the short-term changes that occurred in the Yattir region at the Byzantine to early Islamic transition, as well as longer-term changes. As J. F. Cherry has noted, survey's temporal strength lies in its provision of data that illuminate long-term changes, while its spatial strength lies in the illumination of the rural component of settlement configurations that are usually neglected by excavations.³¹

In the next chapter (2), I review and evaluate the archaeological evidence from the Yattir survey sites. In Chapter 3, I provide an overview of the landscape of the Yattir region, and discuss a number of models to help explain the changes that occurred in settlement patterns following the Muslim conquest. I also review the history of the Yattir region and the northern Negev during the nineteenth and twentieth centuries. This is followed by a chapter (4) on the ancient *Darom*, or southern part of Palestine, of which the Yattir region constitutes the southernmost portion. In Chapter 5, I examine the archaeological evidence for the nature and date of the *Limes Palaestinae*, which passed through the Yattir region. This is followed by Chapters 6–8, in which I review the archaeological evidence from surveys and excavations for the northern and central Negev towns and farms during the Byzantine and early Islamic periods. In Chapter 9, I examine the evidence for H. Kennedy's hypothesis that Syria declined in the century before the Muslim conquest, which has been cited in the context of the debate over the date of the Negev farms. The last chapter (10) consists of a brief conclusion to this volume.

30. See Magness, *JCC*, 16.

31. Cherry, "Frogs Round the Pond," 388.

CHAPTER 2

Map of Nahal Yattir: The Survey Sites

In this chapter, I review all of the sites in the survey map of Nahal Yattir that were identified by Govrin as Byzantine and/or early Islamic, or were undated but have Byzantine or early Islamic pottery that I could identify.¹ The sites are listed by the numbers and in the order published in the survey map, with the page numbers provided in parentheses (an asterisk after the page number indicates the English-language text). The locations of these sites are indicated on the black-and-white survey map on pages 10–11 and on the color survey map included on the CD with this volume. I have summarized the information for each site given by Govrin first, and indicate his dating of the pottery/site. This is followed by my analysis of the pottery, some of which is illustrated in the survey map, and some of which was not illustrated but which I examined. The illustrated pottery is numbered as it is published in the survey map. I assigned the unillustrated pieces random numbers. Pottery that I could not locate in the storerooms of the Israel Antiquities Authority is described as “not found.” I have provided detailed descriptions of the diagnostic pieces that I examined, including the type of vessel and the part that is preserved; the estimated rim diameter in centimeters; a verbal description of the fabric, including the Munsell color number; the inclusions or grits; and in some cases, the identification of the vessel type and date. A general verbal description is provided for the nondiagnostic pieces.

This chapter also includes a discussion of the pottery published from the excavations at Tel ‘Ira, one of the sites in the survey map, and from the monastery at the nearby site of Tel Masos. Following this review, I have grouped the surveyed sites into clusters, in an attempt to give an impression of the ancient populated landscape of the Yattir region. This chapter ends with a tabulation of the survey results.

3. 19/1 (pp. 29*–30*)

Tel Shoqet. A low tel in the center of Biq‘at Hattil, west of Nahal Hevron. There are remains of a wall on the lower eastern and northern slopes. A cistern lies at the foot of the tel.

Pottery: Chalcolithic, Early Bronze II, Iron II, Persian, Hellenistic, Roman (including glass), Byzantine, Early Arab.

Illustrated pottery (p. 28; only two of the illustrated pieces appear to be Byzantine):

- (21) Cooking pot (the drawing incorrectly represents this as a casserole); rim and handle fragment; est dia 16. Gritty, red-brown cooking ware (2.5YR4/4); grey-brown core; some tiny-medium white grits.
- (27) Jug; rim fragment; est dia 6. Smooth, very hard-fired ware; thick light grey core; fired orange-brown (5YR6/6) at surfaces; some tiny-small white grits. FBW Jars, Jugs and Juglets Form 1B, dated mid-6c to late 7c/early 8c.²

1. Govrin, *Map of Nahal Yattir*. All page numbers cited in this discussion refer to Govrin.

2. Magness, *JCC*, 236–38.

Fig. 1. Map of Nahal Yattir.
 From Y. Govrin, Archaeological Survey of Israel: Map of Nahal Yattir (139) (Jerusalem: Israel Antiquities Authority, 1991), large, foldout map of the surveyed region. Reprinted with permission of the Israel Antiquities Authority.

See also the color version of this map, with additional detail, on the CD enclosed at the back of this book.

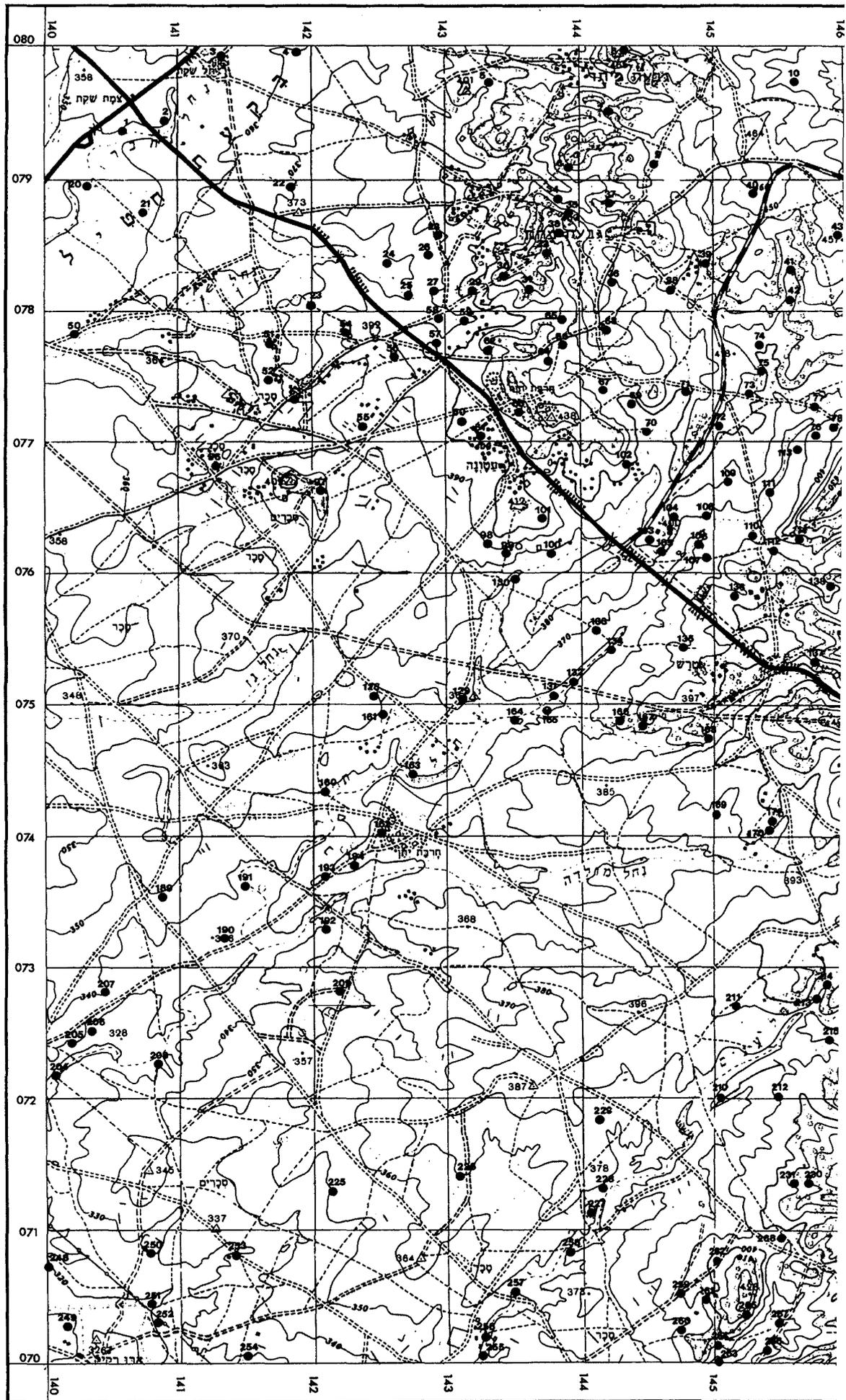
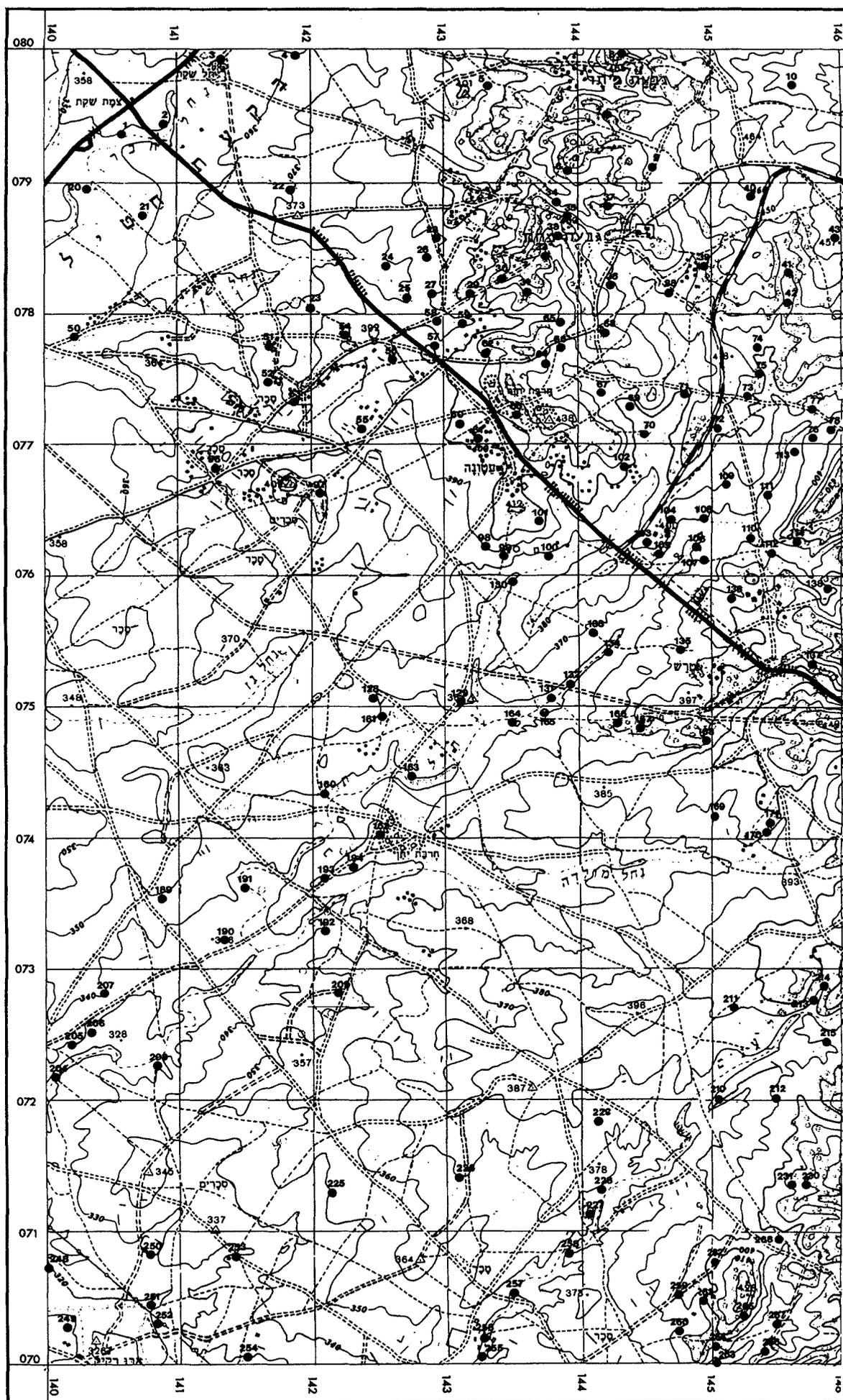
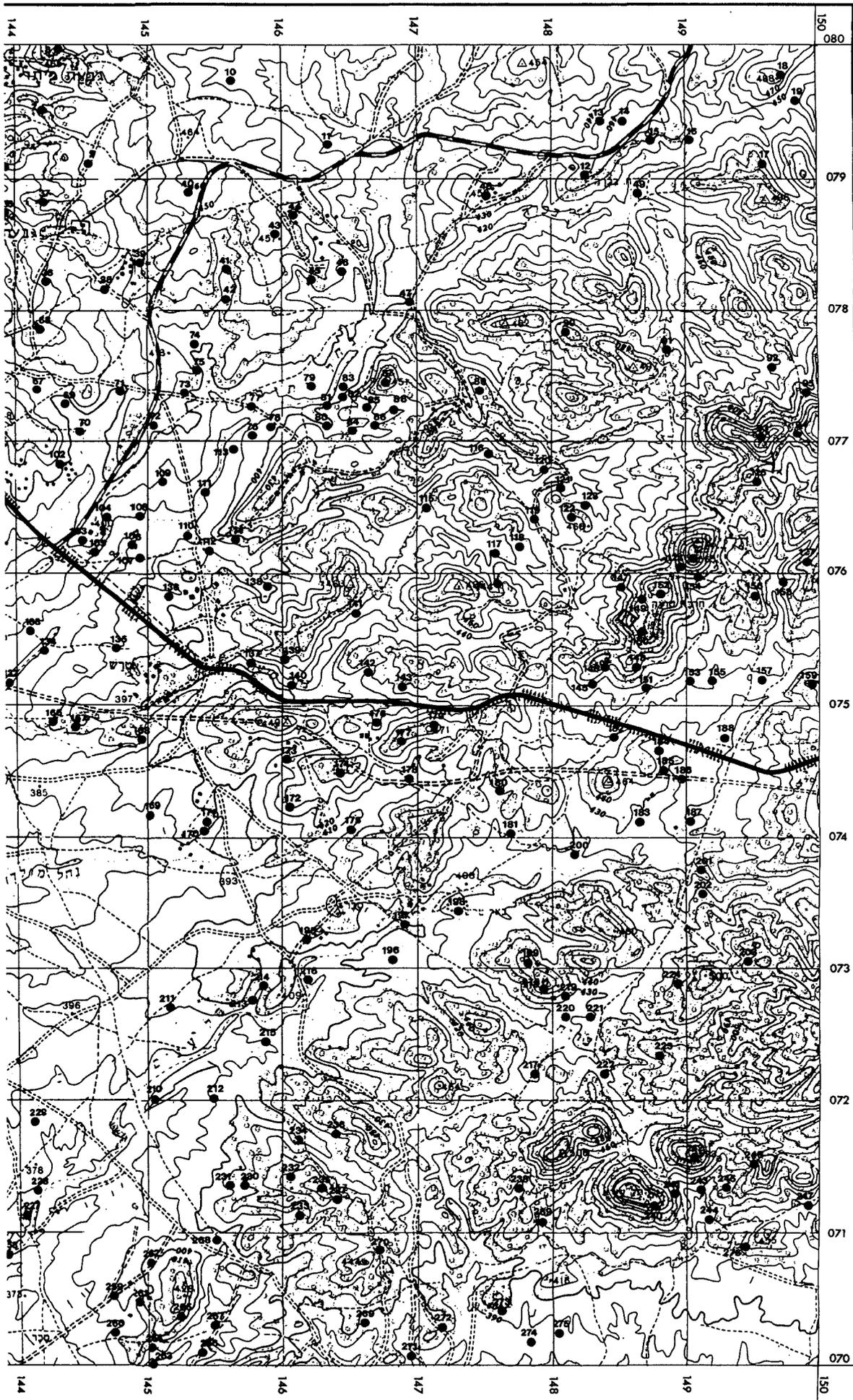


Fig. 1. Map of Nahal Yattir. From Y. Govrin, Archaeological Survey of Israel: Map of Nahal Yattir (139) (Jerusalem: Israel Antiquities Authority, 1991), large, foldout map of the surveyed region. Reprinted with permission of the Israel Antiquities Authority.

See also the color version of this map, with additional detail, on the CD enclosed at the back of this book.





Unillustrated pottery:

- (1) Cooking pot; strap handle. Red-brown cooking ware. Looks Byzantine or early Islamic.
- (2) Casserole; tiny rim fragment. Dark red-brown cooking ware.
- (3) Storejar; tiny body fragment. Grey ware, fired orange-brown on exterior surface; grey slip on exterior; white-painted line over the slip; some tiny-small white grits. Northern Palestinian bag-shaped storage jar, most common from the 6c–8c.³
- (4) Jar; small rim fragment. Soft, smooth, orange-brown ware.
- (5) Jug; flat base fragment. Thin, hard-fired, orange-brown ware. FBW?
- (6) Jug or juglet; flat base fragment. Soft, smooth, orange-brown ware; grey core.
- (7) Jug or oil lamp; flat base fragment. Thick, light brown ware.
- (8) Bowl; tiny body fragment. Widely spaced burnished strips.
FBW Bowls Form 1A or 1B, dated mid-6c to late 7c/early 8.⁴
- (9) Jug? Tiny ring base fragment. Soft, buff ware.
- (10) Small cooking ware body fragment, smooth, pierced with a hole (lantern?).
- (11–15) At least four Byzantine storejar handle fragments, and one body fragment.

Summary: All of the diagnostic pieces here are Byzantine (mainly 6c–7c), although some of the non-diagnostic pieces could be early Islamic (8c–9c).

5. 39/1 (p. 30*)

Giv'at Metar. A square watch booth on a rock outcrop, at the edge of a spur.

Pottery: Byzantine.

Pottery not found.

9. 49/1 (p. 31*)

Giv'at Metar. A square watch-booth on a slope.

Pottery: Byzantine.

Pottery not found.

11. 69/1 (p. 32*)

Harei Yattir. A rock-hewn, bell-shaped cistern on a narrow spur. There are remains of walls in the vicinity. Remain of pens are located to the north, adjacent to the wadi.

Pottery: Iron II, Byzantine.

Pottery not found.

12. 89/1 (p. 32*)

H. Bikhra. This is a square fort (9.50x10 m) on a hilltop, with an entrance near the southeastern corner. A wall divides the structure into two long rooms. Pens are located to the east and west of the fort. Three rock-hewn, bell-shaped cisterns lie to the west.

3. Idem, "Late Roman and Byzantine pottery, preliminary report, 1990," in R. L. Vann (ed.), *Caesarea Papers. Straton's Tower, Herod's Harbour, and Roman and Byzantine Caesarea* (Journal of Roman Archaeology Supplementary Series 5; Ann Arbor, Mich.: Journal of Roman Archaeology, 1992) 131; also see M. Avissar, "The Medieval Pottery," in A. Ben-Tor, M. Avissar, and Y. Portugali, *Yoqne'am I, The Late Periods* (Qedem Reports 3; Jerusalem: Hebrew University, 1996) 147–49, Type 4.

4. Magness, *JCC*, 193–95.

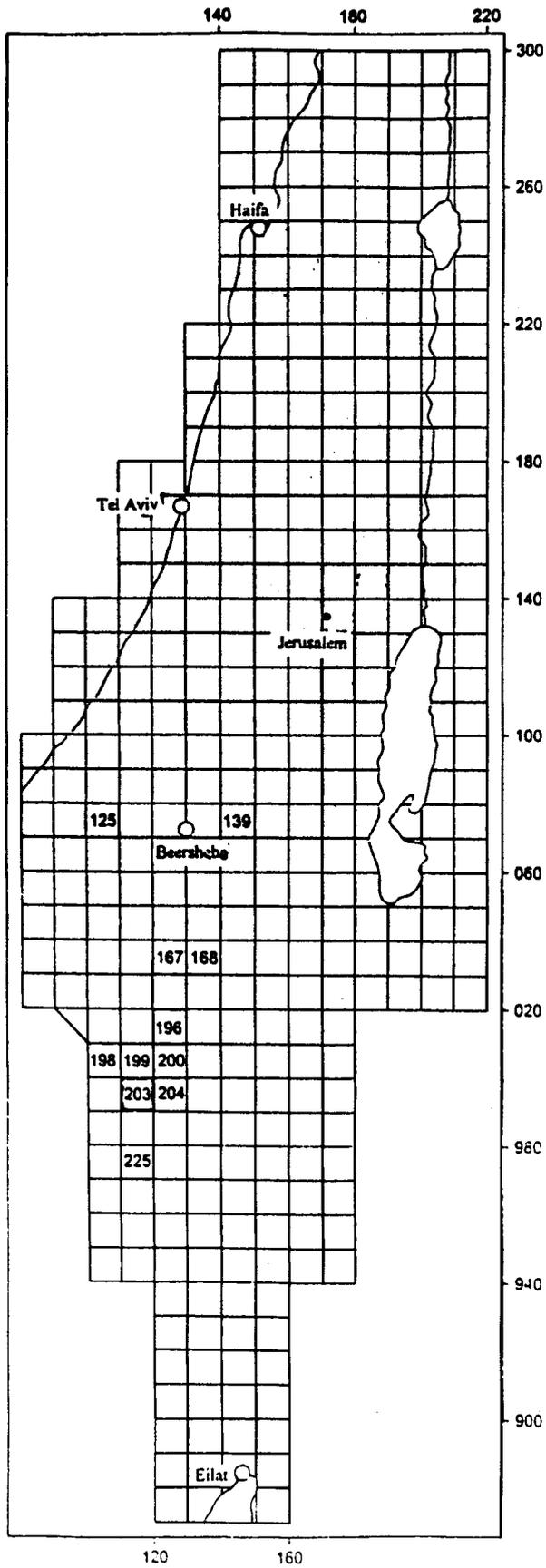
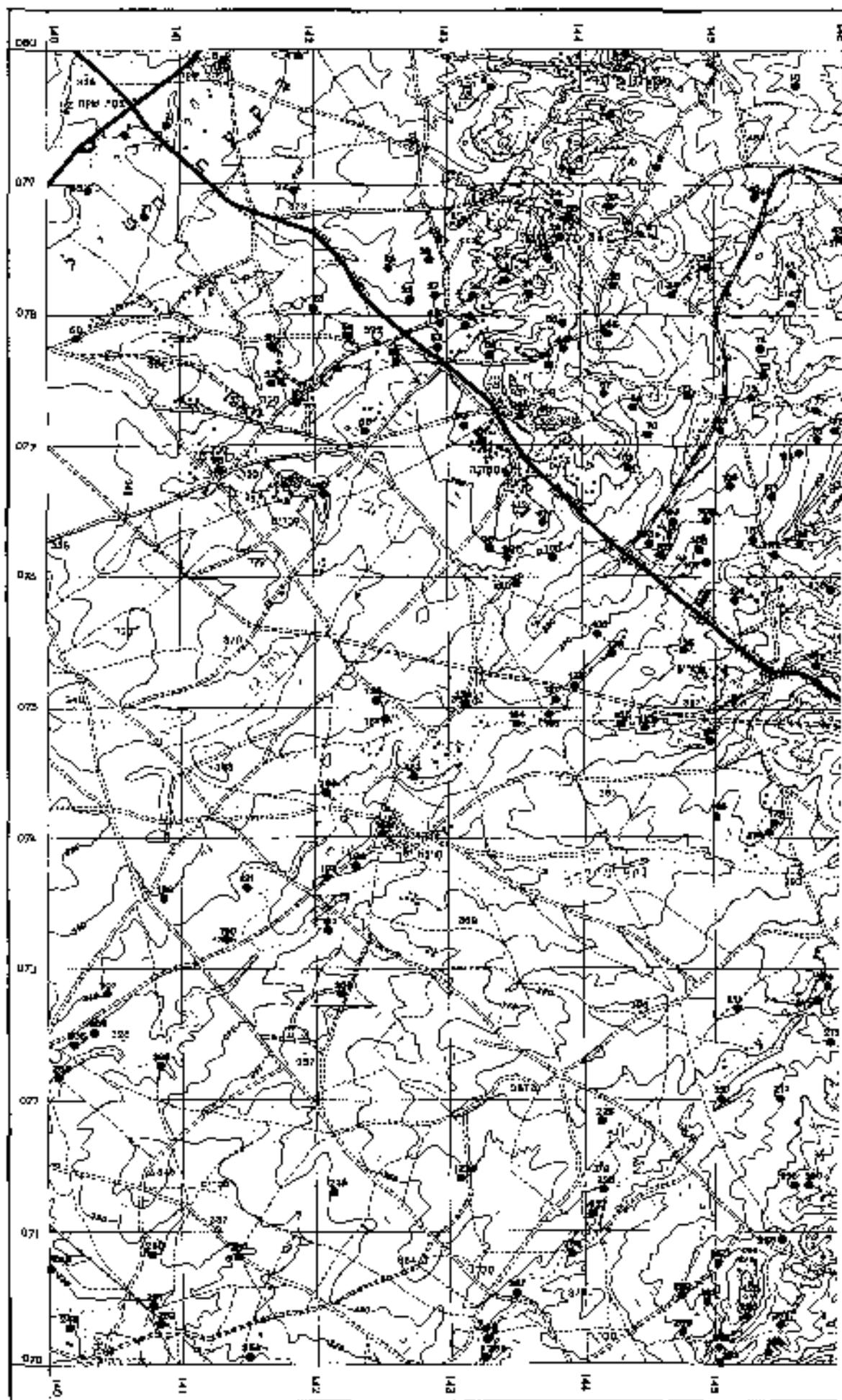


Fig. 2. The locations of the survey maps discussed in this volume. Adapted from M. Haiman, *Archaeological Survey of Israel: Map of Har Ramon* (203) (Jerusalem: Israel Antiquities Authority, 1999), frontispiece. Reprinted with permission of the Israel Antiquities Authority.

Fig. 1. Map of Nahal Yatir. From Y. Govrin, Archaeological Survey of Israel: Map of Nahal Yatir (139) (Jerusalem: Israel Antiquities Authority, 1991), large, foldout map of the surveyed region. Reprinted with permission of the Israel Antiquities Authority.

See also the color version of this map, with additional detail, on the CD enclosed at the back of this book.



Pottery: Hellenistic, Roman, Byzantine, Early Arab.

Illustrated pottery (p. 37):

- (6) Bowl; rim and wall fragment. Soft, smooth, orange-brown ware (2.5YR5/6); flaking dark purple slip (2.5YR3/2) over all; rouletting on exterior; no visible grits. Rouletted Bowls Form 1 (a local version? the ware does not look Jerusalemite), dated late 3c/early 4c through 5c.⁵
- (7) Casserole or casserole lid; tiny rim fragment; est dia 21? Very thin, gritty, red-brown cooking ware (10R4/6); a few tiny-small white grits. Casserole Lids, dated late 3c/early 4 to 9c/10c.⁶
- (9) Jar; rim fragment; est dia 9. Smooth, light orange-brown ware (7.5YR7/4); a few tiny-small white grits.
- (12) Bowl; ring base fragment. Soft, smooth ware; thick light grey core, fired orange-brown (5YR6/4) at surfaces; no visible grits.
- (15) Jar; base fragment. Thin, smooth, light brown ware (7.5YR6/3); fired light orange-brown (7.5YR6/4) on exterior; a few tiny-small white grits.

Note: Illustrated pieces 1–5, 8, 10–11, 14, 16 were NOT FOUND.

Unillustrated pottery:

- (1) Sherd stopper.
- (2–9) Eight Eastern Sigillata “A” body fragments (early Roman).
- (10–12) Three cooking pot handle fragments, all of which look early Roman.
- (13) One casserole handle fragment, which looks early–late Roman.
- (14–17) Four jar handle fragments.
- (18–21) Four cooking ware body fragments, three of which are ribbed.
- (21–51) Thirty-one jar or storejar body fragments, some of which are ribbed.

Summary: All of the diagnostic pieces from this site look early Roman and late Roman (1c–4c/5c); there is nothing that is clearly 6c–7c or later.

15. 89/2 (p. 33*)

Nahal Bikhra. These are two rectangular structures, apparently Early Arab, to the south and north of a small wadi on a spur west of Nahal Bikhra. Several natural caves with stone fences adjacent to the openings are located some 50 m to the east, on the slope.

Pottery: Byzantine–early Arab.

Illustrated pottery (p. 39):

Six pieces are illustrated on p. 39, and I examined another three that are unillustrated. All of this pottery is Mamluke-Ottoman Turkish. There is no Byzantine or early Islamic pottery from this site.

23. 28/6 (p. 35*)

Nahal Shoqet. A bell-shaped cistern dug into the loess plain, 300 m south of the Shoqet Junction–Arad road.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Amphora; handle fragment. Coarse, light red ware; many tiny-small dark grits. Amphorae Class 44 (?), dated early 5c to mid–7c.⁷

5. *Ibid.*, 185–87.

6. *Ibid.*, 215.

7. D. P. S. Peacock and D. F. Williams, *Amphorae and the Roman Economy: An Introductory Guide* (New York: Longman, 1986) 185–87.

- (2) Cooking ware body fragment. Thick, ribbed, dark red cooking ware.
 (3–6) Four storejar or amphora body fragments. Two have thin, narrowly-spaced ribbing.

Summary: This pottery is probably Byzantine (6c–7c).

25. 28/1 (p. 35*)

Nahal Shoqet. These are watch-booths near Nahal Shoqet on two earthen mounds.

Pottery: Byzantine.

Pottery not found.

26. 28/3 (p. 35*)

Nahal Shoqet. This is a watch-booth on a mound in the center of a cultivated plot.

Pottery: Byzantine.

Pottery not found.

29. 38/7 (p. 36*)

Giv'at Mahat. These are three bell-shaped rock-hewn cisterns on the southwestern slopes of Giv'at Mahat.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Bowl; tiny rim fragment. Rouletted on exterior. Late Roman "C" (Phocean Red Slip) Ware Form 3, dated mainly second half of 5c to first half of 6c.⁸
- (2) Bowl; tiny rim fragment. Smooth, very hard-fired ware; grey core, fired light brown at surfaces. Cypriot Red Slip Ware Form 1 (?), dated late 4c (or earlier) to about third quarter of 5c.⁹
- (3) Jar or jug; low ring base fragment.
- (4) Jar or pithos; handle fragment. Very heavy, ridged on top.
- (5) Jar; ribbed body fragment.

Summary: All of this pottery looks 5c/6c–7c.

30. 38/3 (p. 36*)

Giv'at Mahat. This is a square fort with a central inner courtyard on a spur descending southward from Giv'at Mahat. A row of rooms adjoins the southern wall. A large, rectangular courtyard adjoins the structure from the south.

Pottery: Byzantine.

Unillustrated pottery:

All seven sherds are storejar body fragments (one could be a pithos). All are either of orange-brown or light brown ware. Two are ribbed. The possible pithos fragment is decorated with a combed wavy incised band.

Summary: This pottery is probably Byzantine (6c–7c).

8. J. W. Hayes, *Late Roman Pottery* (henceforth referred to as *LRP*) (London: British School at Rome, 1972) 329–38.

9. *Ibid.*, 372–74.

32. 38/4 (p. 37*)

Giv'at Mahat. This is a farmstead on a spur descending southward from Giv'at Mahat, with a large courtyard in the center. The entrance, in the center of the western wall, is flanked by square rooms, and there are rooms along the northern wall. A rectangular courtyard adjoins the structure from the north. Bedouin structures and graves destroyed the southeastern corner of the structure.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Jar or storejar; handle fragment. Orange-brown ware; yellow-white slip on exterior.
- (2) Bowl; body fragment. Thick grey core, fired orange-brown at surfaces; pare-burnished on exterior. FBW.
- (3–4) Two cooking ware body fragments; one is thick and smooth; the other is ribbed.
- (5–13) Nine jar or storejar body fragments. Five are ribbed; two have horizontal combed bands.

Summary: This pottery is either Byzantine (6c–7c) or early Islamic (8c–9c), or both.

33. 38/5 (p. 37*)

Giv'at Mahat. This site consists of approximately ten structures spread along the western bank of a wadi draining southward from Giv'at Mahat. There are remains of long, flint retaining walls along the wadi, mainly along its western bank.

Pottery: Byzantine.

Pottery not found.

34. 38/2 (p. 37*)

Giv'at Mahat. This is a structure on the western spur of Giv'at Mahat. A rectangular courtyard adjoins it from the west.

Pottery: Byzantine.

Unillustrated pottery:

- (1–2) Two casseroles; handles. One is fairly thin and could be early–late Roman.
- (3) Cooking pot; handle fragment. Small and flat. May be early Roman.
- (4) Storejar; handle fragment.
- (5–7) Three cooking ware body fragments.
- (8–12) Five storejar body fragments; four of which are ribbed.

Summary: This pottery could be Byzantine, but it could also be early or late Roman.

36. 48/1 (p. 38*)

Giv'at Mahat. This is a square watch-booth near the confluence of wadis draining southward from Giv'at Mahat.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Iron Age II bowl rim.
- (2) Early Roman cooking pot handle.
- (3) Five body sherds; two of which belong to ribbed storejars; the others are nondiagnostic.

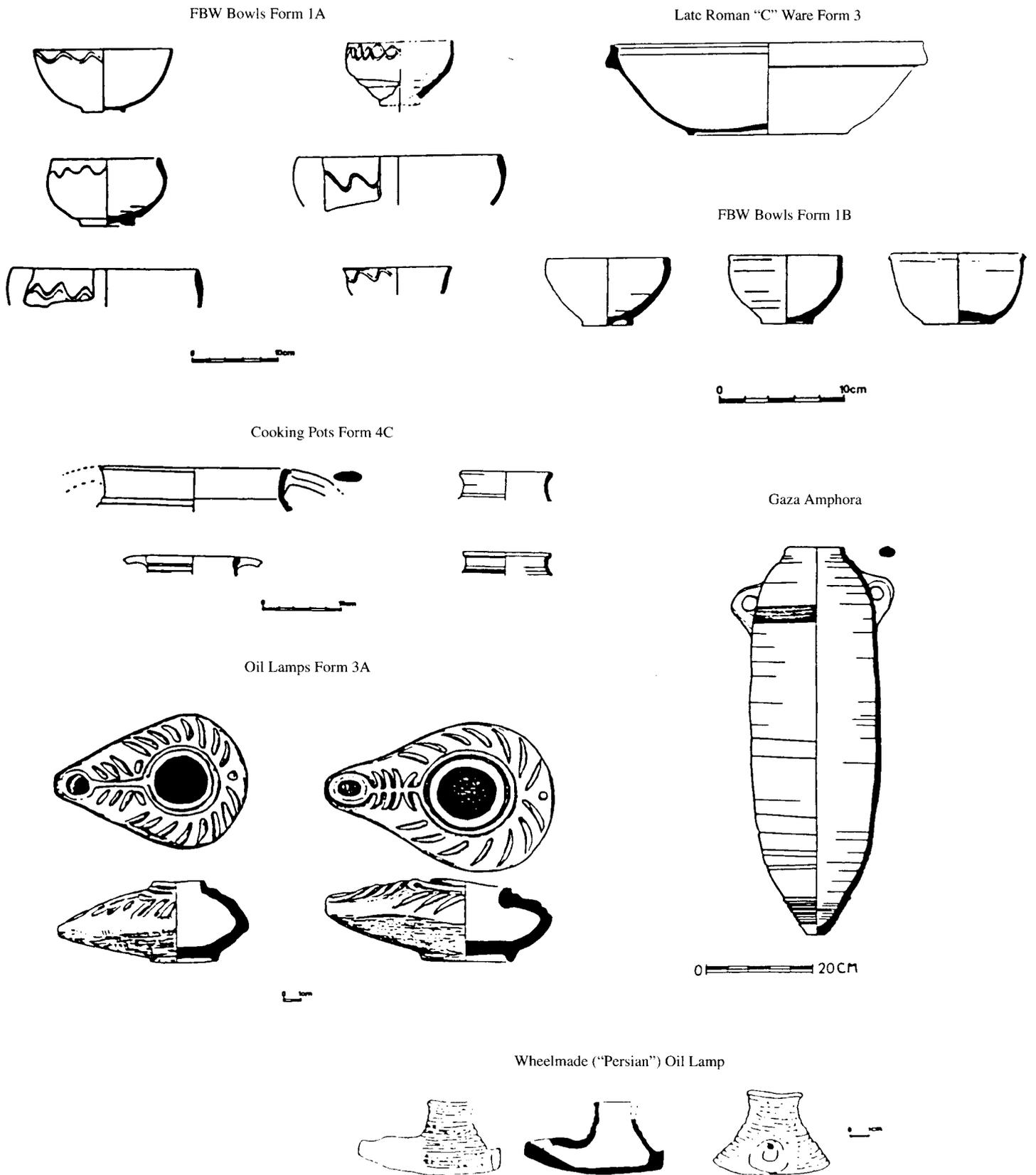


Fig. 3. Some of the common Byzantine (5th/6th–7th century) ceramic types referred to in this volume.

Summary: The diagnostic sherds here are Iron Age and early Roman, and even the ribbed body fragments could be pre-Byzantine. There is no definitely Byzantine material.

39. 48/3 (p. 38*)

Nahal Yattir. This is a square watch-booth on the eastern bank of a tributary of Nahal Yattir, commanding an extensive area.

Pottery: Byzantine.
Pottery not found.

44. 68/3 (p. 40*)

Harei Yattir. This is a structure on the bank of a tributary of Nahal Yattir consisting of three elongated rooms and rectangular courtyard to their east. The entrance is in the northern wall. A bell-shaped, rock-hewn cistern is located nearby.

Pottery: Byzantine.

Unillustrated pottery (these sherds are in a box marked 68/3, with a tag marked 68/3, but the sherds themselves are labeled 86/3, which seems to be an error):

- (1) Bowl; tiny rim fragment. Smooth, hard-fired, orange-brown ware (5YR6/6); burnished bands on exterior; no visible grits. FBW Bowls Form 1B, dated mid-6c to late 7c/early 8c.¹⁰
- (2-7) Six cooking ware body fragments.
- (8-10) Three jar or storejar body fragments.

Summary: The only diagnostic piece here (no. 1) is Byzantine (6c-7c).

50. 07/1 (p. 41*)

Nahal Shoqet. This is a structure on the western bank of Nahal Shoqet.

Pottery: Byzantine.
Pottery not found.

54. 27/3 (p. 42*)

Nahal Shoqet. This is a bell-shaped cistern dug into the loess, 300 m south of the Shoqet Junction-Arad road.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Bowl; low ring base fragment. Red-brown ware (2.5YR5/4); red-brown slip and burnish over all; many tiny-medium white grits. African Red Slip or Late Roman "C" Ware.
- (2-6) Five storejar body fragments; three of which are ribbed, of gritty orange-brown ware; one is of smooth orange-brown ware with a light brown slip on the exterior; the last is of gritty orange-brown ware with combing on the shoulder.

Summary: These sherds all look Byzantine (5c-7c) in date.

10. Magness, *JCC*, 193-95.

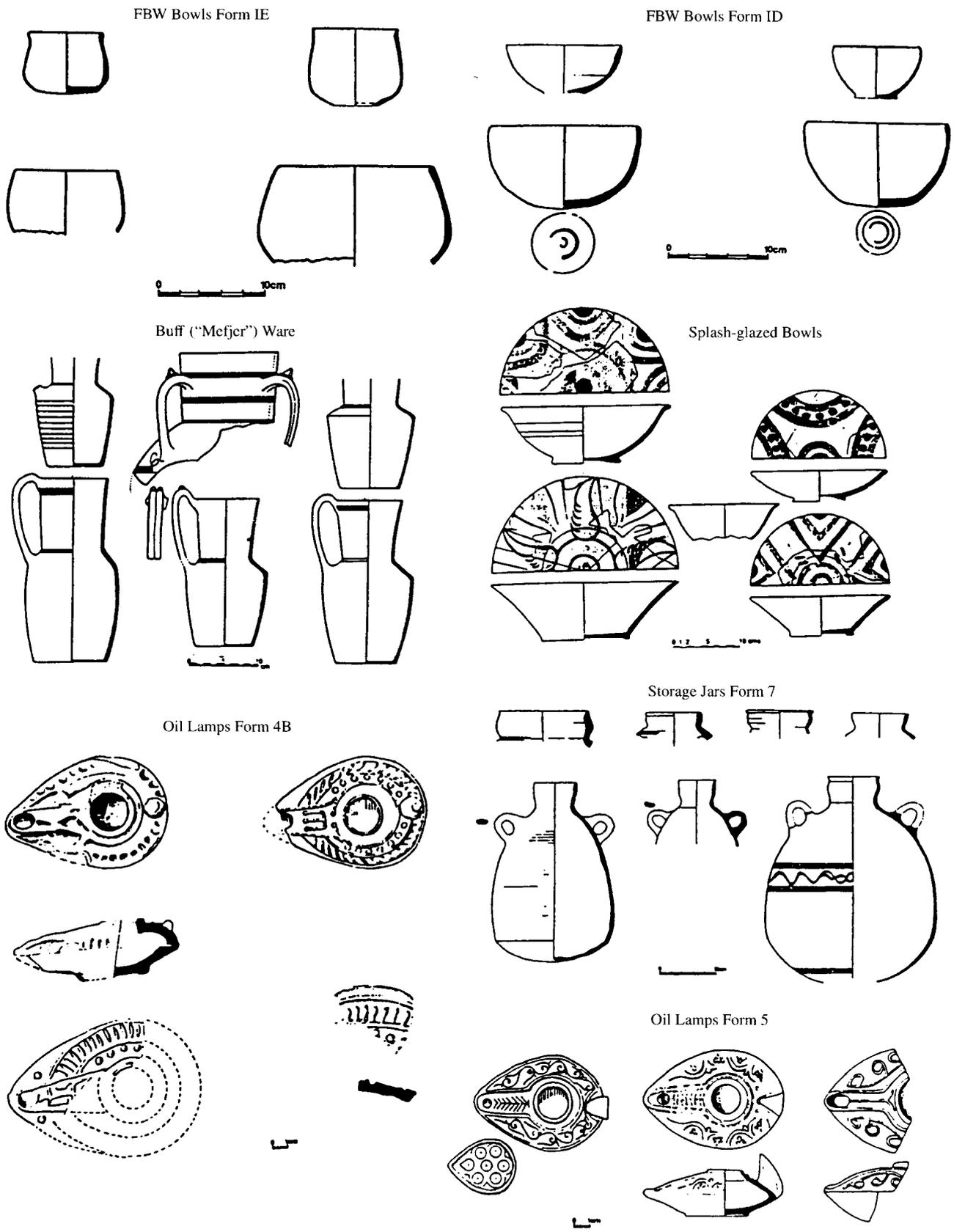


Fig. 4. Some of the common early Islamic (7th/8th–9th/10th century) ceramic types referred to in this volume.

57. 27/1 (p. 43*)

Nahal Shoqet. This is a square watch-booth on a mound in the center of an agricultural plot.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Jar; handle. Heavy, light yellow-brown ware. Islamic.
- (2–6) Five jars; body fragments. One looks like a Byzantine ribbed storejar of orange-brown ware, but the others all appear to be Islamic, especially one of very hard-fired, grey ware, fired dark orange-brown at surfaces, with a greenish slip and combed horizontal bands on exterior.

Summary: Except for the possible Byzantine storejar body fragment, all of the pottery from this site looks early Islamic (8c–9c) and could be even later.

60. 37/6 (pp. 43*– 44*)

H. Hur. This site consists of the remains of structures extending in a row from north to south for some 100 m, on a moderate spur south of H. Hur (below, Site 63). There are adjoining rectangular rooms in the north and west of the site.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Cooking pot; small loop handle fragment. Early Roman.
- (2) Jar or pithos; handle.
- (3) Thin cooking ware body fragment.
- (4) Jar; low ring base fragment.
- (5–8) Four storejar body fragments, all ribbed.

Summary: The only diagnostic piece here is early Roman (1c); the nondiagnostic pieces could be early Roman, late Roman, or Byzantine.

61. 37/7 (p. 44*)

H. Hur. These are the remains of a basilical church on a plateau 100 m south of the Shoqet Junction–‘Arad road. The central hall was partitioned into a nave and two aisles. An outer apse was not found in the eastern wall. A segment of a mosaic floor and limestone paving stones were uncovered in the nave. A narthex adjoins the church to its west, with an atrium along the front. Rectangular rooms lie along the northern side and western sides of the atrium. A central bell-shaped cistern drained the atrium. Rooms and courtyards built of large flint stones are located to the north of the church. A segment of a decorated marble screen lies near the northern wall of the church. Many roof tile fragments are scattered about.

Pottery: Byzantine.

Pottery not found.

63. 37/8 (p. 45*)

H. Hur. This is a large site on the southern slopes of the Harei Yattir range, covering two elongated hills (ca. 200 dunams) overlooking the Be’er-sheva’ Basin from north. The ruins are scattered on the summits and slopes, descending southward toward the Tel Shoqet–‘Arad junction. On the northeast side of the site are the remains of a large church. It has a rectangular nave on an east–west axis. Four square rooms run along the northern section, with their entranceways facing the nave, to the south. On the western side

is a narthex and a rectangular atrium. Along the northern and southern sides of the atrium are six square rooms. The southwest corner of the atrium is supported by a buttress. A cylindrical rock-hewn cistern is located in the center of the atrium. An ancient road traverses the saddle between the hills of H. Hur. There are two square towers on both sides of the road, on the watershed. The settlement, descending southward, includes square structures. In between are lanes, rock-hewn granaries, and agricultural installations. There are also scores of bell-shaped, rock-hewn cisterns. A section of a massive wall in the southwestern part of the site may represent part of the settlement's wall. The settlement of H. Hur served as a central village for the surrounding area during the Byzantine period.

Pottery: Iron II, Persian, Hellenistic, Roman, Byzantine, Early Arab (also stone vessels), Mamluke.

Illustrated pottery (p. 59):

- (11) Bowl; rim fragment; est dia 20. Smooth, very hard-fired, light orange-brown ware (5YR6/6); orange-red slip (2.5YR5/6) and burnish over all; incised wavy line on rim; no visible grits. Cypriot Red Slip Ware Form 9, dated ca. 550 to end of 7c.¹¹
- (12) Bowl; rim fragment; est dia 22? Hard-fired, red ware (10R5/6); dark red slip (10R5/8) and burnish over all; a few tiny white grits. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.¹²
- (13) Bowl; rim fragment; est dia 20. Very worn, pink-red ware (2.5YR5/6); pink-red slip (10R5/6) and burnish over all; some tiny-large white grits. Egyptian Red Slip Ware "A" Type I, dated second half of 5c or slightly later.¹³
- (14) Bowl; rim fragment; est dia 20? Smooth, very hard-fired, orange-brown ware (5YR6/6); red-brown slip (2.5YR4/4) and burnish over all; fired light brown (7.5YR6/4) on rim; rouletting on exterior below rim; no visible grits. Cypriot Red Slip Ware Form 9, dated ca. 550 to end of 7c.¹⁴
- (15) Bowl; rim fragment; est dia 26. Thick, orange-brown ware (2.5YR5/6); dark orange-red slip (2.5YR5/8) over all; some tiny-small white grits. African Red Slip Ware Form 105, dated ca. 580/600–660+.¹⁵
- (16) Bowl; rim fragment; est dia 27. Smooth, very hard-fired, orange-brown ware (5YR6/4); dark red slip (10R4/8) and burnish over all; fired light brown (7.5YR6/4) on rim; rouletting on exterior below rim; a few small white grits. Cypriot Red Slip Ware Form 9, dated ca. 550 to end of 7c.¹⁶
- (20) Bowl; rim fragment; est dia 22. Hard-fired, light brown ware (7.5YR6/3); yellow-white slip (10YR7/3) over all; some tiny-small white grits. Looks Islamic.
- (25) Storejar; rim and neck fragment; dia 8. Thick, sandy, orange-brown ware (5YR6/4); many tiny-medium white grits. Looks Byzantine.¹⁷
- (28) Storejar; rim and neck fragment; dia 8. Smooth, hard-fired, orange-brown ware (5YR6/4); pink-brown slip (5YR7/3) on exterior; many tiny dark and some tiny-large white grits. Storage Jars Form 4C, dated late 6c to 7c.¹⁸
- (29) Cooking pot; rim fragment; dia 9. Thin, brittle, gritty, dark red-brown cooking ware (10R4/4); some tiny-small white grits. Cooking Pots Form 4B, dated 5c/6c to late 7c/early 8c.¹⁹

11. Hayes, *LRP*, 378–82.

12. *Ibid.*, 329–38.

13. *Ibid.*, 389–91.

14. *Ibid.*, 378–82.

15. *Ibid.*, 166–69.

16. *Ibid.*, 378–82.

17. See Magness, "Late Roman and Byzantine Pottery," 131.

18. *Idem*, *JCC*, 224–25.

19. *Ibid.*, 219–21.

- (30) Cooking pot; small rim fragment; est dia 8? Gritty, red-brown cooking ware (2.5YR4/6); dark red-brown slip (10R4/4) over all; some tiny-small white grits. Cooking Pots Form 4B, dated 5c/6c to late 7c/early 8c.²⁰
- (31) Juglet; body and base fragment. Soft, dark orange-brown ware (5YR6/6); light grey core; some tiny-small white grits. FBW Jars, Jugs and Juglets Form 2A, dated mid-6c to early 8c.²¹

(p. 60):

- (6) Bowl; rim fragment. Porous, light pink ware (5YR7/3); light yellow-brown slip (10YR8/4); white and green-blue glaze over interior. Polychrome Splashed and Mottled Ware, dated 9c-10c.²²

Unillustrated pottery:

- (1) Bowl; rim fragment; est dia 23. Hard-fired, orange-brown ware (2.5YR5/6); dark orange-red slip (10R5/8) and burnish over all; a few tiny-small white grits. African Red Slip or Late Roman "C" Ware.
- (2) Amphora; rim fragment; dia 8. Thick, coarse, brown ware (5YR5/4); roughly finished on exterior around rim; many tiny-medium white and dark grits. Gaza amphora.
- (3) Bowl; base fragment. Late Roman "C" Ware.
- (4-6) Three bowls; flat base fragments. One has an incised concentric groove on bottom of exterior. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.²³
- (7) Bowl; rim fragment. Late Roman "C" Ware Form 1, Type D, dated early third quarter of 5c.²⁴
- (8) Bowl; rim fragment. Rouletting on exterior below rim. Cypriot Red Slip Ware Form 1, dated late 4c (or earlier) to about third quarter of 5c.²⁵
- (9) Bowl; base fragment. Stamped cross. Late Roman "C" Ware Motif 71 (?), "Cross with double outline," mostly Group III, dated late 5c to early 7c.²⁶
- (10) Bowl; rim fragment. Incised vertical line on rim. Plain, vertical rim. Egyptian Red Slip "A" Ware.²⁷
- (11-15) Five Late Roman "C" Ware body fragments.
- (16) Cypriot Red Slip Ware body fragment.
- (17) Egyptian Red Slip "A" Ware body fragment.
- (18-23) Four bowl rim fragments, and two body fragments. FBW Bowls Form 1B, dated mid-6c to late 7c/early 8c.²⁸
- (24) Bowl; rim fragment. Similar to FBW Bowls Form 2C, dated mid-7c to 9c/10c.²⁹
- (25) Bowl; base fragment. Pare-burnished. FBW Bowls Form 1D or 1E, dated late 7c/early 8c to 9c/10c.³⁰
- (26) Bowl; rim fragment. FBW Bowls Form 2A, dated mid-7c to 9c/10c.³¹
- (27) Storejar; rim fragment. Thick, light orange-brown ware. Looks Byzantine.
- (28) Storejar; body fragment. Ribbed.
- (29) Oil lamp; complete nozzle. Gritty, brown ware. Wheelmade ("Persian") lamp, dated 6c-7c.³²

20. Ibid.

21. Ibid., 239-40.

22. Avissar, "The Medieval Pottery," 78-80, Type 6.

23. Ibid., 193-96.

24. Hayes, *LRP*, 325-27.

25. Ibid., 372-74.

26. Ibid., 356-66.

27. An unidentifiable form; see *ibid.*, 387-95.

28. Magness, *JCC*, 193-95.

29. Ibid., 198-200.

30. Ibid., 193-96.

31. Ibid., 198-99.

32. Ibid., 129; 146, fig. 3: 5-6; also see R. Rosenthal and R. Sivan, *Ancient Lamps in the Schloessinger Collection* (Qedem 8; Jerusalem: Hebrew University, 1978) 122-23.

- (30) Cooking pot; small rim fragment; est dia 8? Gritty, red-brown cooking ware (2.5YR4/6); dark red-brown slip (10R4/4) over all; some tiny-small white grits. Cooking Pots Form 4B, dated 5c/6c to late 7c/early 8c.²⁰
- (31) Juglet; body and base fragment. Soft, dark orange-brown ware (5YR6/6); light grey core; some tiny-small white grits. FBW Jars, Jugs and Juglets Form 2A, dated mid-6c to early 8c.²¹

(p. 60):

- (6) Bowl; rim fragment. Porous, light pink ware (5YR7/3); light yellow-brown slip (10YR8/4); white and green-blue glaze over interior. Polychrome Splashed and Mottled Ware, dated 9c-10c.²²

Unillustrated pottery:

- (1) Bowl; rim fragment; est dia 23. Hard-fired, orange-brown ware (2.5YR5/6); dark orange-red slip (10R5/8) and burnish over all; a few tiny-small white grits. African Red Slip or Late Roman "C" Ware.
- (2) Amphora; rim fragment; dia 8. Thick, coarse, brown ware (5YR5/4); roughly finished on exterior around rim; many tiny-medium white and dark grits. Gaza amphora.
- (3) Bowl; base fragment. Late Roman "C" Ware.
- (4-6) Three bowls; flat base fragments. One has an incised concentric groove on bottom of exterior. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.²³
- (7) Bowl; rim fragment. Late Roman "C" Ware Form 1, Type D, dated early third quarter of 5c.²⁴
- (8) Bowl; rim fragment. Rouletting on exterior below rim. Cypriot Red Slip Ware Form 1, dated late 4c (or earlier) to about third quarter of 5c.²⁵
- (9) Bowl; base fragment. Stamped cross. Late Roman "C" Ware Motif 71 (?), "Cross with double outline," mostly Group III, dated late 5c to early 7c.²⁶
- (10) Bowl; rim fragment. Incised vertical line on rim. Plain, vertical rim. Egyptian Red Slip "A" Ware.²⁷
- (11-15) Five Late Roman "C" Ware body fragments.
- (16) Cypriot Red Slip Ware body fragment.
- (17) Egyptian Red Slip "A" Ware body fragment.
- (18-23) Four bowl rim fragments, and two body fragments. FBW Bowls Form 1B, dated mid-6c to late 7c/early 8c.²⁸
- (24) Bowl; rim fragment. Similar to FBW Bowls Form 2C, dated mid-7c to 9c/10c.²⁹
- (25) Bowl; base fragment. Pare-burnished. FBW Bowls Form 1D or 1E, dated late 7c/early 8c to 9c/10c.³⁰
- (26) Bowl; rim fragment. FBW Bowls Form 2A, dated mid-7c to 9c/10c.³¹
- (27) Storejar; rim fragment. Thick, light orange-brown ware. Looks Byzantine.
- (28) Storejar; body fragment. Ribbed.
- (29) Oil lamp; complete nozzle. Gritty, brown ware. Wheelmade ("Persian") lamp, dated 6c-7c.³²

20. Ibid.

21. Ibid., 239-40.

22. Avissar, "The Medieval Pottery," 78-80, Type 6.

23. Ibid., 193-96.

24. Hayes, *LRP*, 325-27.

25. Ibid., 372-74.

26. Ibid., 356-66.

27. An unidentifiable form; see *ibid.*, 387-95.

28. Magness, *JCC*, 193-95.

29. Ibid., 198-200.

30. Ibid., 193-96.

31. Ibid., 198-99.

32. Ibid., 129; 146, fig. 3: 5-6; also see R. Rosenthal and R. Sivan, *Ancient Lamps in the Schloessinger Collection* (Qedem 8; Jerusalem: Hebrew University, 1978) 122-23.

Summary: Most of this pottery is Byzantine (5c/6c–7c), but there is also some 8c–9c/10c material.

64. 37/1 (p. 45*)

Nahal Hur. Two structures on the slopes of a spur north of H. Hur (above, Site 63; Bedouin shacks presently cover the site).

Pottery: Byzantine–Early Arab.

Illustrated pottery (p. 61):

- (1) Bowl; body fragment. Soft ware; thick grey-brown core (5YR5/1), fired orange-brown (5YR6/6) at surfaces; orange-red slip (2.5YR5/6) over all, fired to dark purple (2.5YR4/2) on exterior; rouletting on exterior; some tiny-large white and dark grits. Rouletted Bowls Form 1, dated late 3c/early 4c through 5c.³³
- (2) Bowl; small rim fragment; est rim dia 21. Thick, hard-fired, orange-brown ware (7.5YR6/4); yellow glaze over all; dark green glazed band over part of interior; a few tiny-small dark grits. Early Islamic splash-glazed ware, dated 9c–10c.³⁴
- (3) Bowl; small rim fragment; est dia 21. Hard-fired, light brown ware (7.5YR7/3); vertical strips of dark green, yellow-green, and dark purple glaze on interior; some tiny dark grits. Early Islamic splash-glazed ware, dated 9c–10c.³⁵
- (4) Bowl; small rim fragment; est dia 23. Very worn, hard-fired, light brown ware (7.5YR7/2); very worn dark green glaze over interior, dripped over exterior of rim; some tiny dark grits. Early Islamic monochrome glazed ware, dated 8c/9c–10c.³⁶
- (5) Bowl; small rim fragment; est dia 14. Hard-fired, pink-brown ware (5YR7/4); yellow-brown slip (10YR7/4) over all; some tiny white and dark grits.
- (6) Bowl; small base fragment. Smooth, hard-fired ware; thick grey core, fired light brown (5YR5/4) on interior; burnished to orange-brown color (5YR6/6) on exterior; a few tiny-small white grits. FBW Bowls Form 1D or 1E, dated late 7c/early 8c to 9c/10c.³⁷
- (7) Jug; small base fragment. Hard-fired, pink ware (5YR7/4); white slip (7.5YR7/3) on exterior; many tiny dark grits.

Unillustrated pottery:

- (1) Bowl; tiny rim fragment. Smooth, hard-fired, orange-brown ware (5YR5/6); grey core (5YR5/1); light orange-brown slip (5YR6/4) on exterior and over rim; burnished over all; a few small-medium white grits. FBW Bowls Form 2B, dated mid–7c to 9c/10c.³⁸
- (2) Storejar or jar; handle fragment. Smooth, hard-fired, yellow-brown ware (10YR7/3); some tiny dark grits. Storage Jars Form 7, dated late 7c to 9c/10c.³⁹
- (3) Cooking pot; rim and handle fragment; est dia 12. Gritty, red-brown cooking ware (2.5YR4/6); many tiny-large white grits.
- (4) Bowl; small rim fragment. Smooth, very hard-fired ware; thin grey core; orange-brown ware (2.5YR5/4); light orange slip (5YR7/4) on exterior; no visible grits. The ware is like FBW, but the profile resembles Late Roman “C” Form 3.

33. Magness, *JCC*, 185–87.

34. J. A. Sauer and J. Magness, “Ceramics: Ceramics of the Islamic Period,” in E. M. Meyers (ed.), *The Oxford Encyclopedia of Archaeology in the Near East* (New York: Oxford University Press, 1997) 478; Avissar, “The Medieval Pottery,” 78–81, Type 6.

35. Sauer and Magness, “Ceramics of the Islamic Period,” 478; Avissar, “The Medieval Pottery,” 78–81, Type 6.

36. Avissar, “The Medieval Pottery,” 78–79; Type 5.

37. Magness, *JCC*, 193–96.

38. *Ibid.*, 198–200.

39. *Ibid.*, 230–31.

- (5) Bowl; base fragment. Smooth, very hard-fired ware; light grey core; orange-brown ware (2.5YR6/4); incised circular groove in center of outside of base; some tiny-large white grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.⁴⁰
- (6) Cooking pot; handle fragment. Gritty, dark red-brown cooking ware. Large vertical loop handle.
- (7) Storejar or jar; handle. Light brown ware; white slip.
- (8) Casserole; handle. Gritty, dark red-brown cooking ware.
- (9) Storejar; handle. Smooth, hard-fired, orange-brown ware.
- (10) Jar; body fragment. Thick white ware; combed horizontal and wavy bands.
- (11) Cooking pot; body fragment. Very thick, coarse, dark red-brown ware.
- (12–14) Three jar or jug body fragments.

Summary: Except for the rouletted bowl fragment and perhaps the unillustrated cooking pot rim and handle (no. 3), all of the pottery dates to (or could date to) the 8c–10c.

68. 47/5 (p. 46*)

Tuwaiyil el Mahdhi. This is a square fortress on a summit commanding the surrounding area. The main entrance, partially destroyed, is located in the center of the eastern wall. There are rows of rooms along the northern, eastern, and southern sections, and an open courtyard with cistern in the center of the fortress. The remains of relatively later structures and courtyards are located adjacent to the fortress.

Pottery: Roman, Byzantine, Early Arab, Mamluke.

Illustrated pottery (p. 63):

- (1) Bowl; tiny rim fragment; est dia 5. Thin, smooth, hard-fired, streaky light orange-brown ware (7.5YR7/3); no visible grits. FBW Bowls Form 1E, dated 8c–9c.⁴¹
- (2) Bowl; small rim fragment; est dia 6. Thin, smooth, very hard-fired ware; very thick dark grey core, fired streaky orange-brown (5YR6/6) at surfaces; non-continuous burnished bands on exterior; no visible grits. FBW Bowls Form 1E, dated 8c–9c.⁴²
- (3) Bowl; small rim fragment; est dia 8. Thin, smooth, very hard-fired ware; thick grey-brown core, fired streaky grey-brown and orange-brown (5YR6/6) at surfaces; a few tiny-small white grits. FBW Bowls Form 1E, dated 8c–9c.⁴³
- (4) Bowl; small rim fragment; est dia 16. Thin, smooth, hard-fired ware; brown core, fired streaky orange-brown (5YR6/6) at surfaces; no visible grits. FBW Bowls Form 1E, dated 8c–9c.⁴⁴
- (5) Bowl; tiny rim fragment; est dia 9. Hard-fired, deep orange-brown ware (2.5YR4/8); orange-brown slip (2.5YR6/6) on exterior; a few tiny white grits. FBW Bowls Form 2A, dated mid-7c to 9c/10c.⁴⁵
- (6) Bowl; small rim fragment; est dia 13. Gritty, light orange-brown ware (5YR6/6); many tiny dark and a few tiny-large white grits.
- (7) Deep bowl; large rim and wall fragment; dia 22. Gritty, porous, light yellow-brown ware (10YR8/3); many tiny-small white and dark grits.
- (8) Bowl; small, worn, rim fragment; est dia 16. Thick brown core, fired red-brown (2.5YR5/6) at surfaces; many tiny-medium white grits.
- (9) Deep bowl; large rim and wall fragment; dia 13. Porous, hard-fired, light brown ware (7.5YR7/4); light yellow-brown slip (10YR8/3) over all; some tiny-medium white grits.

40. *Ibid.*, 193–96.

41. *Ibid.*

42. *Ibid.*

43. *Ibid.*

44. *Ibid.*

45. *Ibid.*, 198–99.

- (10) Jar or jug; rim and handle fragment with applied knob of clay; est dia 12. Porous, hard-fired, light yellow-brown ware (2.5YR8/3); some tiny dark grits. Buff ("Mefjer") ware, dated second half of 8c on.⁴⁶
- (11) Jar or jug; tiny rim fragment. Moldmade. Same ware as no. 10.
- (12) Jar or jug; tiny fragment of stamped handle. Same ware as no. 10.
- (13) Oil lamp; tiny body fragment. Moldmade. Same ware as no. 10. Oil Lamps Form 5, dated 8c–10c.⁴⁷
- (14) Oil lamp; nozzle fragment and handle fragment. Moldmade. Oil Lamps Form 5, dated 8c–10c.⁴⁸

Unillustrated pottery:

- (1–5) Five bowls; flat base fragments. Pare-burnished on exterior; incised concentric grooves on bottom of exterior of base. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.⁴⁹
- (2) Jar; body fragment. Moldmade. Buff Ware, dated second half of 8c on.⁵⁰
- (3) Casserole; handle fragment. Thick, heavy, dark brown cooking ware.
- (4) Bowl; rim fragment. Porous, yellow-brown ware; probably once glazed.
- (5) Juglet; worn stump-base (not FBW).
- (6) Jug; fragment of long, narrow spout. Smooth, orange-brown ware. Looks Islamic.⁵¹
- (7–8) Two jars or jugs; flat base fragments. One of coarse, orange-brown ware; the other of porous, yellow-brown ware.
- (9) Casserole; handle fragment. Relatively thin, red-brown cooking ware. Looks Byzantine.
- (10) Cooking pot; rim and handle fragment. Thick, dark red-brown ware. Looks early Islamic.
- (11–17) Seven cooking ware body fragments.
- (18) Jar; tiny body fragment. Moldmade. Thick, yellow-white ware; moulded relief decoration. Buff ("Mefjer") ware, dated second half of 8c on.⁵²
- (19–25) Seven bowls; body fragments (including part of a flat base with incised concentric grooves on bottom of exterior). FBW Bowls Form 1D or 1E, dated late 7c/early 8c to 9c/10c.⁵³
- (26) Jar; handle fragment. Yellow-white ware.
- (27) Jar; rim and handle fragment. Ware is like early Islamic FBW.
- (28) Storejar; handle fragment. Byzantine or later.
- (29–31) Three storejars or pithoi; handles. Large, heavy. Early Islamic or later.
- (32–40) Nine storejars or jars; body fragments, four of which are decorated with combed bands and one of which is of buff ware.

Summary: There is no identifiable Roman or Byzantine pottery here. All of the diagnostic pieces are 8c–9c and later. Only a couple of nondiagnostic pieces, such as the casserole handle (no. 9), look like they could be Roman or Byzantine.⁵⁴

46. Sauer and Magness, "Ceramics of the Islamic Period," 477–78; Avissar, "The Medieval Pottery," 155–61; Types 2–12.

47. Magness, *JCC*, 258–59; also see Rosenthal and Sivan, *Ancient Lamps*, 133–37.

48. *Ibid.*

49. Magness, *JCC*, 193–96.

50. Sauer and Magness, "Ceramics of the Islamic Period," 477–78; also see Avissar, "The Medieval Pottery," 155–61; Types 2–12.

51. See for example Avissar, "The Medieval Pottery," 168; Type 25 no. 4 and Type 26 no. 2.

52. Sauer and Magness, "Ceramics of the Islamic Period," 477–78; also see Avissar, "The Medieval Pottery," 155–61; Types 2–12.

53. Magness, *JCC*, 193–96.

54. It is interesting to compare the relatively sketchy plan of the fortress at Tuwaiyil el Mahdhi published by Govrin, *Map of Nahal Yattir*, 62, with Gichon, "The Sites of the *Limes* in the Negev," 154, ill. 4, where all of the walls are indicated by solid black lines. The ceramic evidence reviewed here contradicts Gichon's proposal (p. 153) that the fortress was established during Severan times, and was occupied only until the Muslim conquest.

72. 57/1 (p. 47*)

Harei Yattir. These are two square pens on a slope west of Nahal Yattir.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Storejar; rim fragment; est dia 7. Thick, soft, red-brown ware (2.5YR4/4); thick light brown core; some tiny-medium white grits.
- (2) Large bowl or jar; thick base fragment with low ring foot. Thick, coarse, red-brown ware (2.5YR5/4); thick light brown core; many tiny-medium white grits.
- (3) Casserole or lid; tiny rim fragment. Gritty, orange-red cooking ware (2.5YR5/8); many tiny white and dark grits.
- (4–9) Six body fragments, of which 2 seem to belong to Gaza amphoras; one is a lightly ribbed storejar of light brown ware, and the other three are too small to determine.

Summary: Probably all Byzantine (6c–7c).

73. 57/5 (pp. 47*–48*)

Harei Yattir. This is a square watch-booth on a cliff overlooking the western bank of Nahal Yattir. An entrance is located in the eastern wall. To its north and east are eroded rooms. A horseshoe-shaped pen lies in a depression to the east of the watch-booth. Further to the east, a dam is built across the wadi.

Pottery: Roman, Byzantine.

Unillustrated pottery:

A box contains only nondiagnostic jar, storejar, and cooking ware body fragments. They all look Byzantine, not early–late Roman.

74. 57/7 (p. 48*)

Harei Yattir. This is a square watch-booth on a mound, commanding the surrounding cultivated land, with a rectangular pen adjoining. A second watch-booth lies to the northwest. Some 150 m to the north is a dam.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Storejar; large rim fragment; dia 9. Yellow-brown ware (10YR7/4); some tiny dark grits. Similar to Storage Jars Form 5A, dated late 6c to early 8c.⁵⁵
- (2) Casserole; tiny handle fragment.
- (3–7) Five storejar body fragments, four of which are ribbed.

Summary: This pottery all looks 6c–7c.

75. 57/6 (p. 48*)

Harei Yattir. This is a rectangular watch-booth on the western bank of a tributary of Nahal Yattir. In the wadi are the remains of a dam.

Pottery: Byzantine.

55. Magness, *JCC*, 226.

Unillustrated pottery:

- (1) Cooking pot; handle fragment.
- (2–3) Two cooking ware body fragments.
- (4–6) Three ribbed storejar body fragments.
- (7) Jar; very thick, micaceous body fragment.

Summary: Although these pieces are not diagnostic, they all look Byzantine (6c–7c).

78. 57/2 (p. 49*)

Nahal Yattir. This is a rectangular farmstead on a moderate slope descending to Nahal Yattir from the east. Several courtyards adjoin it from the west, covering an area of one and a half dunams, and partitioned by interior walls.

Unillustrated pottery:

- (1) Cooking pot; tiny rim and handle fragment. Gritty, orange-red cooking ware. Early Roman.
- (2) Cooking pot; rim fragment. Gritty, red-brown cooking ware. Similar to Cooking Pots Form 4C, dated 5c/6c to late 7c/early 8c.⁵⁶
- (3) Coarse bowl or casserole; rim fragment. Gritty, orange-brown ware.
- (4) Bowl; base fragment. Smooth, very hard-fired ware. Thick grey core, fired brown at surfaces, streaked on interior; pare-burnished over exterior; a few tiny white grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.⁵⁷
- (5) Pithos; large, heavy handle. Hard-fired, light orange ware (7.5YR7/4); many tiny-large dark grits.
- (6) Jug; handle fragment. Gritty, light yellow-brown ware (10YR8/4); many tiny-small dark grits.
- (7–8) Two cooking ware body fragments; one of which is ribbed.
- (9–18) Ten jar or storejar body fragments, four of which are ribbed, and one of which has a combed horizontal band.

Summary: Except for the early Roman cooking pot (no. 1), all of this pottery looks 8c–9c (cooking pot no. 2 is a Byzantine type, but could continue into the 8c).

79. 67/9 (p. 49*)

Nahal Yattir. These are the remains of a structure on a small mound in the center of an agricultural plot. There is a small dam, south of the mound, near a tributary of Nahal Yattir.

Undated.

Unillustrated pottery:

- (1) Cooking pot; rim and handle fragment. Gritty, red-brown cooking ware. Cooking Pots Form 4B (?), dated 5c/6c to late 7c/early 8c.⁵⁸
- (2–3) Two cooking ware body fragments.
- (4) Jar; body fragment.
- (5–8) Four storejars; body fragments. Three are ribbed.

Summary: All of this pottery looks Byzantine (5c/6c–7c).

56. *Ibid.*, 219–21.

57. *Ibid.*, 193–96.

58. *Ibid.*, 219–21.

80. 67/8 (p. 49*)

Nahal Yattir. A rectangular farmstead near the wadi junction, some 250 m east of Nahal Yattir. In its center is a courtyard flanked by rectangular rooms on the south and west, probably three on either side. Numerous building-stones were robbed from the structure in later times to build nearby fences and pens. To the west, on the southern bank of a tributary of Nahal Yattir are the remains of two dams.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Bowl; rim fragment. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.⁵⁹
- (2) Casserole; tiny handle fragment.
- (3) Large jar or pithos; handle fragment. Gritty, orange-brown ware.
- (4–5) Two cooking ware body fragments.
- (6–9) Four jar or storejar body fragments; two of which are ribbed.

Summary: All of this looks Byzantine (5c/6c–7c).

99. 36/3 (p. 55*)

Nahal Hur. This site consists of a large scattering of pottery on a hill.

Pottery: Byzantine.

Illustrated pottery (p. 78):

- (1) Bowl; small rim fragment. Smooth, hard-fired, thin, fine, dark red ware (10R5/6); dark red slip (10R4/8) and burnish on exterior; a few tiny white grits. African Red Slip Ware Form 52, Type A, number 1 (?), dated ca. 300–350?⁶⁰
- (2) Bowl; rim fragment. Smooth, very hard-fired, light brown ware (2.5YR6/4); splotchy dark brown slip (2.5YR4/3) over all; no visible grits. Cypriot Red Slip Ware Form 1, dated late 4c (or earlier) to about third quarter of 5c.⁶¹
- (3) Bowl; tiny rim fragment. Thick, orange-red ware (2.5YR5/6); orange-red slip (10R5/6) and burnish over all; some tiny white grits. African Red Slip Ware, indeterminate form.
- (4) Bowl; rim fragment; est dia 46? Thick, orange-red ware (2.5YR5/6) and burnish over all; some tiny white grits. African Red Slip Ware Form 67, dated ca. 360–450+.⁶²
- (5) Casserole; rim fragment; est dia 45. Gritty, red-brown cooking ware (2.5YR5/6); some tiny white and dark grits and glistening flecks of gold mica (illustrated upside-down). Casseroles Form 1, dated late 3c/early 4c to 8c/9c.⁶³
- (6) Jar or jug; handle fragment. Smooth, very hard-fired ware; thick grey core; fired streaky orange-brown (5YR6/4) and grey at surfaces; a few tiny-very large white grits. FBW Jars, Jugs and Juglets Form 1B, dated mid–6c to early 8c.⁶⁴
- (7) Jar or cooking pot; rim and handle fragment; est dia 9. Worn, brown ware (5YR5/4); thick grey core; some tiny-medium white grits.

59. Hayes, *LRP*, 329–38.

60. *Ibid.*, 74–78.

61. *Ibid.*, 372–74.

62. *Ibid.*, 112–16.

63. Magness, *JCC*, 211–13.

64. *Ibid.*, 237–38.

Unillustrated pottery:

- (1) Cooking pot; rim and handle fragment; est dia 9. Worn, gritty, red-brown cooking ware (10R4/6); grey core; some tiny white grits. Byzantine.
- (2) Bowl; base fragment. Eastern Sigillata "A."
- (3) Storejar; handle fragment. Grey-brown ware; ridged on top.
- (3) Storejar; body fragment. Ribbed, orange-brown ware.

Summary: There is a little early Roman pottery here, but most of the pieces date to the 4c–7c.

100. 36/1 (p. 55*)

Nahal Hur. This is a farmstead on the western bank of Nahal Hur, some 500 m south of the Shoqet Junction–Arad road. There is a square room in the northern section of the main structure. To its south are rooms and pens, with three rooms in the center, and a wide trapezoidal courtyard to their south. A rectangular structure lies on the eastern bank of the wadi. To its east is a blocked cistern. Some 100 m south of farmstead, near Nahal Yattir is a completely preserved Bedouin structure, with a supportive column in its center. Earlier walls were uncovered beneath its walls, apparently belonging to a farmstead. Large quantities of Byzantine pottery were collected. There is a cistern nearby.

Pottery: Byzantine.

Pottery not found.

101. 36/2 (p. 55*)

Nahal Hur. An oval enclosure on the eastern slope of a spur descending from a hilltop. In its center are the remains of structure built of very large flint stones. The surface is covered with unidentified flint debitage, Byzantine and late pottery.

Pottery: Byzantine.

Pottery not found.

102. 46/6 (pp. 55*–56*)

Nahal Hur. A building consisting of rectangular rooms on three levels on the eastern slope of a spur, overlooking Nahal Hur.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Bowl; tiny flat base fragment. Thick, smooth, very hard-fired grey ware; fired streaky grey and orange-brown (5YR6/4) on interior; grey-brown (5YR5/2) on exterior; pare-burnished on exterior, including on bottom of base; no visible grits. FBW Bowls Form 1D or 1E, dated late 7c/early 8c to 9c/10c.⁶⁵
- (2) Storejar; neck fragment; est dia 8. Very tall, straight neck; thick light brown ware (7.5YR6/4); orange core (2.5YR6/4); traces of yellow-brown slip (10YR7/2) on exterior; some tiny-medium white and dark grits. Storage Jars Form 6A, dated late 6c/7c to 8c.⁶⁶
- (3) Storejar; tiny rim fragment; est dia 9. Thick, gritty, orange-brown ware (5YR6/6); many tiny dark and white grits. Looks Byzantine.
- (4) Casserole; horizontal handle fragment. Thick, heavy, gritty, red-brown cooking ware (2.5YR5/6); many tiny dark and some tiny-medium white grits. Looks early Islamic.

65. *Ibid.*, 193–96.

66. *Ibid.*, 227–29.

(5) Cooking pot or casserole; handle fragment. Ribbon-like (flattened); dark red-brown cooking ware (2.5YR3/4). Looks early Islamic.

(6–11) Six cooking ware body fragments.

(12–20) Nine storejar body fragments, three of which are ribbed.

Summary: There is some Byzantine material here (including the storejar rim fragment no. 3, and some of the storejar and cooking ware body fragments), as well as 8c–9c pottery.

103. 46/7 (p. 56*)

Nahal Hur. This is a square farmstead on a spur. The entrance is apparently located near the western corner. In the east and north of the structure are the remains of rooms adjoining a central courtyard. In the western section are limestone column drums, and a perforated square limestone basin. A piece of a limestone lintel carved in relief, containing a narrow rectangle, and a circle with a cross in its center lies outside, near the southern wall.

Pottery: Byzantine.

Pottery not found.

104. 46/5 (p. 56*)

Nahal Yattir. This is a fort on a hilltop, consisting of two interlinked rectangular rooms. The entrance is in the center of the eastern side. Between the rooms is a paved passageway. Outside, near the eastern and southern walls are the remains of walls.

Pottery: Roman, Byzantine.

Pottery not found.

105. 46/4 (p. 56*)

Nahal Yattir. This is a rectangular structure (10 × 15 m), largely eroded, on the eastern slope of a spur running parallel to Nahal Yattir. There are remains of foundations, built of medium-sized flint stones.

Pottery: Byzantine.

Unillustrated pottery:

(1) Casserole; handle fragment.

(2–3) Two cooking ware body fragments.

(4) Jar; body fragment.

Summary: Though not particularly diagnostic, all of these fragments look Byzantine (5c–7c).

109. 56/3 (p. 57*)

Nahal Yattir. Three watch-booths ca. 60 m apart, in a large agricultural plot, near a tributary of Nahal Yattir. To the east of the wadi is a retaining wall.

Pottery: Byzantine.

Illustrated pottery (p. 83):

(1) Bowl; tiny rim fragment. Hard-fired, red-brown ware (10R5/6); dark red slip (10R4/6) and burnish over all; fired dark purple (10R4/2) on rim; no visible grits. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.⁶⁷

67. Hayes, *LRP*, 329–38.

- (2) Bowl; large fragment of low ring base. Orange-brown ware (2.5YR5/6); orange-brown slip (2.5YR5/6) and burnish over all; a few tiny-small white grits; a few gold glistening flecks of mica. African Red Slip or Late Roman "C" Ware.
- (3) Casserole or lid; tiny rim fragment. Thin, gritty, red-brown cooking ware (2.5YR5/6); grey core; many tiny dark grits and glistening gold flecks.

Unillustrated pottery:

- (1) Bowl; body fragment. Late Roman "C" Ware.
- (2-3) Two cooking ware body fragments.
- (4-9) Six jar or storejar body fragments, three of which are ribbed.

Summary: All of this pottery looks Byzantine (5c/6c-7c).

114. 56/6 (p. 59*)

Nahal Yattir. These are the remains of a structure at the edge of a spur overlooking the confluence of Nahal Yeshua^c with Nahal Yattir.

Pottery: Roman-Byzantine.

Unillustrated pottery:

- (1) Bowl; small, worn rim fragment. Late Roman "C" Ware Form 3, dated second half of 5c to first half of 6c.⁶⁸
- (2) Cooking pot; tiny rim fragment. Cooking Pots Form 4, dated 5c/6c to late 7c/early 8c.⁶⁹
- (3-5) Three ribbed cooking ware body fragments.
- (6-10) Five ribbed storejar body fragments.

Summary: All of this pottery looks Byzantine (5c/6c-7c); there is no early-late Roman.

117. 76/1 (p. 59*)

Nahal Yeshua^c. This is a watch-booth on a hilltop, commanding the surrounding agricultural plots. There is an agricultural terrace to the west.

Pottery: Byzantine.

Unillustrated pottery:

A box contains eleven nondiagnostic jar, storejar, and amphora body fragments, six of which are ribbed.

Summary: not diagnostic.

119. 76/2 (p. 60*)

Nahal Yeshua^c. This is a structure on a hilltop, 100 m south of Nahal Yeshua^c. To the south is a rectangular structure, partitioned in two, with an entrance near the southwestern corner.

Pottery: Roman-Byzantine.

Unillustrated pottery:

A small box contains eight nondiagnostic jar or storejar body fragments. One is ribbed, one is lightly ribbed, and one has traces of a combed band.

68. Ibid.

69. Magness, *JCC*, 219-21.

Summary: There are no diagnostic pieces, but the pottery is probably all Byzantine.

122. 86/2 (p. 60*)

Nahal Yeshua^c. This is a rectangular structure on the southwestern slope of a hill with the remains of walls on several levels. A horseshoe-shaped fence on its southern side is apparently built of stones robbed from the structure. Along the slope to the south are several rock-hewn cisterns. Nearby are the remains of structures.

Pottery: Roman-Byzantine.

Unillustrated pottery:

- (1) Bowl; tiny body fragment. Very smooth, hard-fired, dark grey ware; fired streaky dark grey and orange-brown (5YR5/4) on interior; a few tiny white grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.⁷⁰
- (2) Storejar; large neck and shoulder fragment. Thick, smooth, orange-brown ware (5YR5/6); grey core; light orange-brown slip (7.5YR6/4) on exterior; some tiny-very large white and dark grits. Ridge at base of neck; combed horizontal band below. Looks early Islamic.
- (3–4) Two cooking pot handle fragments.
- (5–9) Five cooking ware body fragments.
- (10–15) Six storejar or jar body fragments (one might be a deep bowl, of thin, hard-fired, orange-brown ware with a grey core). Three of the fragments are ribbed, two are combed.

There are also two basalt fragments with holes in the center.

Summary: All of the diagnostic pieces here look 8c–9c, although some of the body fragments and one of the cooking pot handles could be Byzantine.

123. 86/3 (p. 61*)

Nahal Yeshua^c. A rectangular structure on a hillside, with an entrance near the southern corner. There is a well-preserved square room in the eastern part of the structure. South of the entrance are two appendant rooms, diverging from the structure's rectangular ground-plan.

Pottery: Roman-Byzantine (no date appears in the English translation).

Illustrated pottery (p. 87):

Not found. But from the drawings all of this pottery appears to be Byzantine; #2 is a Late Roman "C" Ware Form 3 bowl, and #3 is an FBW Bowl Form 1B.

Unillustrated pottery:

- (1–2) Two different casseroles; handle fragments. Relatively thin, gritty, red-brown cooking ware. Look early–late Roman.
- (3) Bowl; tiny rim fragment. Very delicate, hard-fired ware; thick grey core, fired orange-brown at surfaces; orange slip on exterior. Looks early Roman.
- (4) Bowl; small flat base fragment. Smooth, very hard-fired ware; thick grey core, fired streaky brown on interior and brown on exterior; pare-burnished on exterior. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.⁷¹
- (5–6) Coarse bowl; two large rim fragments; est dia 20. Thick, red-brown ware; horizontal ridges on exterior of rim; many tiny-large white and red grits.

70. *Ibid.*, 193–96.

71. *Ibid.*

(7–9) Three cooking ware body fragments.

(10–12) Three jar or storejar body fragments. One has a horizontal band of combing, one is smooth, one is ribbed.

(13) Jar; base fragment.

Summary: There is early–late Roman pottery here, and the illustrated pottery appears to be Byzantine (5c/6c–7c). But there is also some early Islamic (8c–9c) pottery (such as unillustrated no. 4).

124. 86/1 (p. 61*)

H. So'a. This is a rectangular, rock-hewn cistern on a saddle between Tel Yeshua^c (below, Site 125) and H. So'a (Site 150). There are several cupmarks nearby. The ceiling of the cistern is a hewn dome with two openings for drawing water. Two cisterns lie to the south; low fences—sheepfolds—were subsequently built.

Pottery: Byzantine.

Pottery not found.

125. 96/1 (pp. 61*–62*)

Tel Yeshua^c. This is a structure atop a hill in the Harei 'Anim range, with four wings arrayed around a courtyard. A depression, apparently representing the remains of a cistern, lies in the center of the courtyard. There is a long room in the northern wing, and a row of rooms in the western wing. The eastern wing is built on a steep slope with massive retaining walls. A rectangular room adjoins it from south. Near its northwestern and southwestern corners are square rooms. A large, perforated basin was found in the corner of the central courtyard. South of the structure is a rectangular, fenced-in courtyard, with a depression, apparently a cistern, in its south. Marble slabs are strewn on the surface of the site. The remains are apparently of a monastery.

Pottery: Byzantine.

Illustrated pottery (p. 89):

- (1) Bowl; rim and wall fragment. Red-brown ware, misfired dark purple on rim. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.⁷²
- (2) Bowl; rim fragment. Soft, orange-brown ware. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.⁷³
- (3) Bowl; rim fragment. Smooth, hard-fired, orange-brown ware; red slip and burnish over all; fired yellow-brown on rim. Cypriot Red Slip Ware Form 9, dated ca. 550 to end of 7c.⁷⁴
- (4) Bowl; rim fragment. Smooth, hard-fired, red-brown ware; dark red slip and burnish over all; fired pink-brown on rim; rouletting on exterior below rim. Cypriot Red Slip Ware Form 9, dated ca. 550 to end of 7c.⁷⁵
- (5) Bowl; rim fragment. Smooth, red-brown ware; red-brown slip and burnish over all; fired light brown on rim. Cypriot Red Slip Ware Form 9, dated ca. 550 to end of 7c.⁷⁶
- (6) Bowl; rim fragment. Smooth, very hard-fired ware; thick grey core, fired brown at surfaces; brown slip and burnish; incised wavy line on rim. Cypriot Red Slip Ware Form 9, dated ca. 550 to end of 7c.⁷⁷

72. Hayes, *LRP*, 329–38.

73. *Ibid.*

74. *Ibid.*, 378–82.

75. *Ibid.*

76. *Ibid.*

77. *Ibid.*

- (7) Cooking pot; rim and neck fragment. Gritty, dark red cooking ware. Cooking Pots Form 4B, dated 5c/6c to late 7c/8c.⁷⁸
- (8) Cooking pot; rim and neck fragment. Gritty, red-brown cooking ware. Cooking Pots Form 4B, dated 5c/6c to late 7c/8c.⁷⁹
- (9) Casserole lid; knob handle. Gritty, red-brown cooking ware. Casserole Lids, dated late 3c/early 4c to 9c/10c.⁸⁰
- (10) Juglet; complete (intact). Covered with a layer of dirt. FBW Jars, Jugs and Juglets Form 2A, dated mid-6c to early 8c.⁸¹

Unillustrated pottery:

- (1) Bowl; body fragment. African Red Slip Ware.
- (2) Bowl; base fragment. Late Roman "C" Ware.
- (3) Casserole; handle fragment.
- (4) Jar; rim fragment. Orange-brown ware. Looks Byzantine.
- (5) Bowl; rim fragment. Smooth, orange-brown ware.
- (6) Jar; flat base fragment. Very coarse, thick, poorly fired ware.
- (7-9) Three jars; body fragments. One with ribbing and two with combing.

There is also a fragment of marble and a piece of stone (chalk) with incised Greek letters (a tombstone?).

Summary: All of the diagnostic pieces are Byzantine (5c/6c-7c), and the rest either look Byzantine or could be Byzantine.⁸²

136. 55/3 (p. 64*)

Nahal Yattir. This is a square farmstead on the bank of a tributary of Nahal Yattir. The main entrance lies in the center of the northern side. Living quarters, including three elongated rooms in the south, and a small courtyard in the north, are located in the northeastern corner of a large courtyard. Another set of living quarters adjoins the northern corner, consisting of two units flanking a courtyard. Two square rooms lie on the western side, and there are rectangular and square rooms on the eastern side. The entrance is from the south. There are remains of additional rooms along the eastern and southern exterior walls of the farmstead. A contemporary agricultural terrace was built overlying the farmstead remains; Bedouin now cultivate vegetables in the courtyard.

Pottery: Byzantine.

Unillustrated pottery:

- (1-2) Bowl(s); two body fragments, perhaps from the same bowl. Smooth, very hard-fired, grey ware; fired streaky brown (7.5YR5/3) and orange-brown (5YR6/6) at surfaces; pare-burnished on exterior; a few tiny white grits. FBW Bowls Form 1D or 1E, dated late 7c/early 8c to 9c/10c.⁸³

78. Magness, *JCC*, 219-21.

79. *Ibid.*

80. *Ibid.*, 215.

81. *Ibid.*, 239-40.

82. Gichon, "The Sites of the Limes in the Negev," 153, identified this site as a *limes* fortress established during the Severan period and occupied until the Muslim conquest. There is little resemblance between his plan of the site (p. 154, Ill. 5) and that published by Govrin, *Map of Nahal Yattir*, 89. Only Gichon's plan shows a basilical hall with an apse at the eastern end, and rooms (presumably of a monastery) arranged around a courtyard on the southern side of the basilica.

83. Magness, *JCC*, 193-96.

- (3) Jar or jug; rim fragment; dia 8. Yellow-brown ware (10YR8/4); some tiny-small white and dark grits.
- (4) Bowl; tiny rim fragment; est dia 9. Orange-brown ware (5YR6/6); many tiny dark grits.
- (5) Jar or jug; very worn, small, flat base fragment. Coarse, gritty, grey ware, fired orange-brown (5YR6/6) at surfaces; light brown slip (10YR6/3) on exterior; many tiny-small white and dark grits.
- (6–7) Jar; two body sherds from the same jar. Gritty, thick, red-brown ware (2.5YR4/6); orange-brown core (5YR6/4); many tiny dark and some tiny-medium white grits; decorated on exterior of shoulder with neat rows of short, incised vertical lines.
- (8) Sherd stopper. Made from a storejar of soft, smooth, dark orange-brown ware.
- (9–16) Eight cooking ware body fragments, two of which are ribbed.
- (17–27) Eleven jar or storejar body fragments; only one of which is ribbed; two are decorated with combed bands.

Summary: All of the diagnostic pieces here look like they either are or could be early Islamic (8c–9c), although some of the nondiagnostic pieces could be Byzantine (6c–7c).

139. 65/3 (p. 65*)

Nahal So'a. This is a rectangular fort on the southern end of a spur. An entrance, on the south, led into a central courtyard. On the north are three rectangular rooms, and there are other rooms along the western and southern walls.

Pottery: Roman, Byzantine.

Unillustrated pottery:

- (1–2) Two Eastern Sigillata "A" bowl body fragments.
- (3–5) Three early Roman cooking pot handle fragments.
- (6) Bowl; rim fragment. Soft, smooth, orange-brown ware. Shelf-rim.
- (7) Casserole lid; rim fragment. Looks Byzantine.
- (8) Ribbed cooking ware body fragment. Thick, red-brown ware.
- (9–14) Eight body fragments, one of which is a ribbed storejar; the others are plain.

Summary: This pottery looks early Roman and Byzantine (5c–7c), though none of the diagnostic pieces is Byzantine.

148. 85/3 (p. 66*)

Harei 'Anim. This is a terraced farmstead on a steep slope south of H. So'a (below, Site 150). The main structure is partitioned into two broadrooms. To its west is a rectangular courtyard. East of the main structure are two adjoining courtyards. There are remains of a small installation in the western courtyard. A pen is built in a natural depression between the structure and the hillside to its south. On a slope to the southwest of the farmstead are two bell-shaped, rock-hewn cisterns and a flint-stone trough.

Pottery: Byzantine.

Illustrated pottery (p. 97):

- (1) Bowl/basin; very worn rim fragment. Coarse, orange-brown ware (5YR5/4); light yellow slip (10YR 7/4) over all; some tiny dark grits.
- (2) Bowl; large rim fragment; est dia 23. Hard-fired, red-brown ware (2.5YR5/6); dark red slip (10R4/6) and burnish over all; fired dark purple (10R2.5/1) on rim; no visible grits. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.⁸⁴

84. Hayes, *LRP*, 329–38.

- (3) Large bowl; rim fragment; est dia 35? Light orange-brown ware (7.5YR7/4); some tiny-small dark grits.
- (4) Cooking pot; rim and handle fragment; est dia 15. Gritty, red-brown cooking ware (10R4/6); burned on the handle; some tiny-small white grits.

Unillustrated pottery:

- (1) Cooking pot; rim and handle fragment. Gritty, red-brown cooking ware.
- (2–4) Fragments of three cooking pot handles.
- (5) Cooking pot; tiny rim fragment, very thin.
- (6–7) Two tiny jar/jug body fragments; one of smooth, orange ware; the other with thin ribbing.

Summary: The only diagnostic illustrated piece is the LRC bowl (no. 2), which is Byzantine (5c–6c). The unillustrated sherds look early Roman.

150. 85/2 (p. 67*)

H. Sa‘a. This is a settlement (ca. 10 dunams in area) on the summit of a steep hill commanding its surroundings and the cliffs to the east; the northern side was not settled. On the eastern slope are pens, caves, and several cisterns. A church, built on a north–south axis, with a nave measuring 19 × 40 m, was constructed on the southern side of the hilltop. The excavation of contemporary Bedouin graves unearthed many small, colored tesserae. At the end of the eastern wing is an apse with a chord measuring 7 m. The church entrance is in the northern wing. Nearby is a square defence tower. There are remains of three rooms in the western wing. A rectangular complex adjoining the church from the south apparently served as living quarters. An entranceway leads to it, and a built corridor leads from the entranceway to a rectangular courtyard. Rooms lie along its eastern and northern sides. On the hill is a two-story structure, apparently a defence tower, with a large, later courtyard adjoining it on the east. Rooms and courtyards, and several hewn troughs lie on the summit. The site has been damaged by robbery in recent years.

Pottery: Early Bronze (in caves area, on the eastern slope), Roman-Byzantine (entire site).

Illustrated pottery (p. 99):

Not found. According to the drawings, this pottery appears to be:

- (1) Bowl; Cypriot Red Slip Ware Form 1, dated late 4c (or earlier) to about third quarter of 5c.⁸⁵
- (2) Bowl.
- (3–7) Bowls; Late Roman “C” Ware Form 3, dated mainly second half of 5c to first half of 6c.⁸⁶
- (8) Bowl; indeterminate type of Late Roman Red Ware.
- (9) Basin; southern Byzantine type, dated 6c–7c.⁸⁷
- (10–12) Deep bowls or basins.
- (13–14) Cooking pots. Cooking Pots Form 4B, dated 5c/6c to late 7c/early 8c.⁸⁸

In a box marked “Kh. Sa‘weh 85/2” are the following sherds, which were not drawn and are not numbered:

- (1–4) Four bowls; body fragments. Late Roman “C” Ware. One is the beginning of a rim of Late Roman “C” Ware Form 3, dated mainly second half of 5c to first half of 6c.⁸⁹
- (5–6) Two bowls; tiny rim fragments. African Red Slip Ware, indeterminate types.

85. *Ibid.*, 372–74.

86. *Ibid.*, 329–38.

87. Magness, *JCC*, 160.

88. *Ibid.*, 219–21.

89. Hayes, *LRP*, 329–38.

- (7–8) Two bowls; body fragments. African Red Slip Ware.
- (9) Cooking pot; tiny rim and handle fragment. Looks Byzantine.
- (10–11) Casseroles; one rim and handle fragment and one handle fragment.
- (12–15) Four cooking ware body fragments.
- (16) Mortarium or pithos; handle fragment of soft, dark orange-brown ware.
- (17) Gaza amphora; shoulder fragment with handle.
- (18) Jug; handle. Soft, red-brown ware.
- (19–26) Eight jar body fragments, including part of one base. Six are ribbed.

Summary: All of this material looks Byzantine (5c/6c–7c).

151. 85/4 (p. 67*)

Nahal 'Anim. This is a structure on the northern bank of a tributary of Nahal 'Anim. To the south and east of the structure are the remains of walls, apparently an outer courtyard. There is a bell-shaped, rock-hewn cistern to the east.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Bowl; small rim fragment; est dia 10. Smooth, hard-fired ware; thick grey core, fired orange-brown (5YR6/6) at surfaces; some tiny-small white and dark grits. FBW Bowls Form 1A or 1B, dated mid-6c to late 7c/early 8c.⁹⁰
- (2) Mortarium; rim and handle fragment. Gritty, orange-brown ware (7.5YR6/4); many tiny-small dark and some quartz grits. The handle is ridged.
- (3) Amphora; handle fragment with deep thumb impression inside. Coarse, smooth, red-brown ware. Gaza amphora.
- (4–7) Four storejar body fragments; all of light brown to orange-brown ware; two have ribbing, one is smooth with the beginning of combing at the top.

Summary: This pottery all looks 5c/6c–7c.

153. 95/7 (p. 68*)

Harei 'Anim. This is an enclosure on the summit of a spur descending eastward from H. So'a. Unidentifiable flint implements are scattered on the surface. On the eastern slope is a rectangular structure. Two bell-shaped, rock-hewn cisterns are located on the southeastern slope. Nearby are the remains of structures.

Pottery: Roman-Byzantine.

Pottery not found.

157. 95/5 (p. 69*)

Nahal 'Anim. This comprises the remains of a wall on the western slope of a spur west of Nahal 'Anim. A rectangular room adjoins its southern end, and another wall meets its southern end.

Undated.

Unillustrated pottery:

- (1) Cooking pot; rim and handle fragment. Gritty, red-brown cooking ware.
- (2) Jar or amphora; handle fragment.

90. Magness, *JCC*, 193–95.

(3–5) Three cooking ware body fragments.

(6–7) Two ribbed storejar body fragments.

Summary: All of this pottery looks Byzantine (5c/6c–7c).

158. 95/1 (pp. 69*–70*)

Nahal 'Anim. This is a settlement comprising four units at the confluence of wadis, at the eastern foot of Tel Yeshua'. In the northern unit, the structures are clustered on the slope west of the wadi. Along the western section are seven adjoining square and rectangular rooms. Rooms and courtyards lie on a lower level, near the wadi. To the north and west of the complex are the remains of retaining walls. Two small caves fronted by stone fences, apparently of later date, are located to the southwest of the northern complex, in a small wadi. The southern unit lies some 75 m south of the northern complex, on the opposite bank of the wadi. It includes the remains of structures and courtyards. To their east is a square courtyard with a segment of a stone basin. The eastern unit lies on the slope opposite the southern unit. It consists of several long, parallel courtyards, and adjoining rooms from within and without. A round pen, apparently of later date, lies to the east. Near a small wadi to the north are two rectangular structures. The western structure is partitioned lengthwise, with its northern section adjacent to the rock ledge. In a cross-section of the wadi are the remains of two dams, sections of which are preserved on the eastern wadi bank. Along both banks of the wadi are ancient agricultural remains: retaining walls, conduits, dams and terraces.

Pottery: Byzantine.

Pottery not found.

162. 24/4 (pp. 70*–71*)

H. Yittan. This is a tel (45 dunams, 360 m above sea level), between Nahal Yattir and Nahal Molada, overlooking an ancient crossroads. To its north, a cliff-like slope plunges down 20 m. A Roman-Byzantine farmstead currently inhabited by Bedouin occupies the summit. The structure consists of adjoining rectangular rooms on the west and east flanking a square courtyard, with a circular stone-built installation. In the northwest of the tel are two rectangular structures, each containing rectangular rooms around a courtyard. Bell-shaped, rock-hewn cisterns are located to the north and south. On top of the tel and its eastern slope is a scattering of flint implements and pottery.

Pottery: Chalcolithic, Iron II, Persian, Hellenistic, Roman, Byzantine–Early Arab.

Illustrated pottery (p. 108):

- (1) Bowl; small rim fragment; est dia 16. Hard-fired, red-brown ware (2.5YR4/4); dark red slip (10R4/6) and burnish over all; fired brown (2.5YR4/4) over all; many tiny-small white grits. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.⁹¹
- (2) Jar or storejar; tiny rim fragment; est dia 9. Smooth, hard-fired ware, orange-brown ware (5YR6/6); well-defined grey core; light brown slip (7.5YR6/4) on exterior; a few tiny-small white grits.
- (3) Jar; small rim and neck fragment; est dia 8. Thick, smooth, pink-brown ware (2.5YR5/6); yellow-brown slip (7.5YR7/4); many tiny-large white grits.
- (4) Cooking pot; small rim fragment; est dia 10? Gritty, red-brown cooking ware (10R4/4); purple-red slip (10R3/4) on exterior; many tiny-small white grits. Similar to: Cooking Pots Form 4B, dated 5c/6c to late 7c/early 8c.⁹²

91. Hayes, *LRP*, 329–38.

92. Magness, *JCC*, 219–21.

- (5) Bowl; small rim fragment; est dia 15. Thick, gritty, pink-brown ware (5YR6/4); yellow-brown slip (7.5YR7/4) over all; many tiny dark and a few tiny-large white grits.
- (6) Cooking pot; small rim fragment; est dia 11. Gritty, red-brown cooking ware (10R4/6); purple-red slip (10R3/3) over all; many tiny white grits. Cooking Pots Form 4C, dated 5c/6c to late 7c/early 8c.⁹³
- (7) Bowl; tiny rim fragment; est dia 15. Smooth, very hard-fired, orange-brown ware (2.5YR5/6); fired streaky brown (5YR5/4) on interior and grey-brown (5YR5/2) on exterior; grey core; pare-burnished on exterior; a few tiny white grits. FBW Bowls Form 1E, dated 8c–9c.⁹⁴
- (8) Deep bowl; rim fragment; est dia 17. Porous, white ware (10YR8/2); some tiny dark grits.
- (9) Deep bowl; tiny rim fragment. Coarse, friable, light orange-brown ware with many grits. This looks either pre-Roman or Mamluke.
- (10) Bowl; small rim fragment; est dia 12. Porous, white ware (10YR8/2); some tiny-small dark grits.
- (11) Cooking pot; tiny rim fragment; est dia 11? Brittle, gritty, red-brown cooking ware (2.5YR4/6); dark purple slip (10R3/1) on exterior; some tiny white grits. Similar to Cooking Pots Form 4B, dated 5c/6c to late 7c/early 8c.⁹⁵
- (12) Cooking pot; rim and handle fragment; est dia 11. Gritty, red-brown cooking ware (2.5YR4/4); dark purple slip (10R3/1) over part of handle; many tiny white grits. Similar to Cooking Pots Form 4C, dated 5c/6c to late 7c/early 8c.⁹⁶
- (13) Juglet; ca. 1/4 dia of rim and neck; dia 5. Smooth, orange-brown ware (7.5YR6/4); grey core; a few tiny white grits.
- (14) Jug; tiny, battered rim fragment; est dia 7. Gritty, dark orange-brown ware (5YR5/6); traces of light red-brown slip (5YR7/4) on exterior; many tiny-small white and dark and some medium-large white grits.
- (15) Cooking pot; tiny rim fragment; est dia 8. Soft, red-brown ware (2.5YR5/4); some tiny-small white grits. Cooking Pots Form 4C, dated 5c/6c to late 7c/early 8c.⁹⁷
- (16) Jug or juglet; tiny rim fragment; est dia 6. Porous, yellow-white ware (10YR8/3); some tiny dark grits.
- (17) Jar/jug or bowl?; small rim fragment; est dia 19. Light brown ware (7.5YR5/4); yellow-brown slip (10YR7/3) on exterior; some tiny-small white grits.
- (18) Jug; small rim fragment; dia 9. Light brown ware (7.5YR6/3); yellow-brown slip (10YR7/3) on exterior; many tiny-medium white grits.
- (19) Storejar; rim and neck fragment; est dia 9. Thick, brown ware (7.5YR6/4); light brown slip (7.5YR7/3); many tiny-small dark grits.
- (20) Storejar; rim and neck fragment; est dia 8. Thick, heavy, yellow-brown ware (10YR8/3); roughly finished on exterior; some tiny-medium white grits. Storage Jars Form 6B, dated late 6c/7c to 8c.⁹⁸
- (21) Jar/jug; tiny body fragment. Moldmade. Light pink ware (7.5YR7/4); yellow-brown slip (10YR7/3) on exterior; relief decoration on exterior; some tiny white and dark grits. Buff (“Mefjer”) ware, dated second half of 8c on.⁹⁹
- (22) Mamluke handmade, painted body fragment.

Unillustrated pottery:

- (1–3) Three bowls; flat base fragments. Smooth, very hard-fired ware; thick grey core; fired brown to orange-brown at surfaces; streaky grey and brown to orange-brown on interior; pare-burnished on

93. Ibid.

94. Ibid., 193–96.

95. Ibid., 219–21.

96. Ibid.

97. Ibid.

98. Ibid., 227–30.

99. Sauer and Magness, “Ceramics of the Islamic Period,” 477–78; Avissar, “The Medieval Pottery,” 158–59, Type 6.

- exterior; two have incised concentric grooves in center of bottom of base on exterior. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹⁰⁰
- (4–5) Two bowls; rim fragments. Thin, smooth, orange-brown ware (one has a grey core and is burnished in bands on exterior). FBW Bowls Form 1E, dated 8c–9c.¹⁰¹
- (6–7) Two bowls; body fragments. FBW (both look early Islamic).
- (8–14) Seven bowls; two tiny rim fragments; and five base and wall fragments. FBW Bowls Forms 1D and 1E, dated late 7c/early 8c to 9c/10c.¹⁰²
- (15) Jar handle. Very hard-fired ware. In form resembles FBW Jars, Jugs and Juglets Form 1B or 2B, dated mid–6c to early 8c, but the ware looks early Islamic.
- (16) Casserole lid. Turban-shaped knob handle. Thin, gritty, dark red-brown cooking ware. Abbasid.¹⁰³
- (17–19) Three cooking pots; rim and handle fragments. Smooth, very hard-fired, red-brown cooking ware; thick grey cores. Look early Islamic.
- (20) Cooking pot; rim and handle fragment. Worn, gritty, light red-brown cooking ware; dark purple slip on exterior. Byzantine or early Islamic.
- (21–24) Four cooking pots; handle fragments. Three look early Roman and one is too fragmentary to identify.
- (25–26) Two casserole handles. One looks early Roman or late Roman; the other is of dark brown cooking ware and could be Byzantine or early Islamic.
- (27–30) Four casseroles or lids; rim fragments of relatively thick red-brown or orange-brown cooking ware. Byzantine or early Islamic.
- (31) Bowl; rim fragment. Thick, soft, yellow-white ware.
- (32) Bowl; tiny rim fragment. Red-slipped. Early Roman?
- (33–38) Six jars or jugs; base fragments. Light yellow ware.
- (39–40) Two storejars; rim fragments. One infolded rim of thick, soft, orange-brown ware; one plain rim of hard-fired, orange-brown ware.
- (41–53) Thirteen storejars; handle fragments. One might be a Gaza amphora; some of the others look early Islamic.

Other pottery from this site includes ribbed storejar body fragments, jar or jug body fragments of light yellow ware, and handmade painted or plain Mamluke body fragments.

Summary: There is some Byzantine (5c/6c–7c) here (also note the early Roman), but most of the diagnostic pottery looks early Islamic (8c–9c/10c). Note also the Mamluke pottery, which was not identified in the publication.

163. 24/1 (p. 71*)

Nahal Yattir. This is a rectangular structure, apparently Early Arab, on the northern bank of Nahal Yattir. A square courtyard adjoins the structure from the east. On the southern bank are two bell-shaped, rock-hewn, plastered cisterns.

Pottery: Early Arab.

Pottery not found.

100. Magness, *JCC*, 193–96.

101. *Ibid.*

102. *Ibid.*, 193–96.

103. J. A. Sauer, “The Pottery of Jordan in the Early Islamic Periods,” in A. Hadidi (ed.), *Studies in the History and Archaeology of Jordan I* (Amman: Department of Antiquities, 1982) 333.

164. 34/1 (p. 71*)

Nahal Yattir. This is a square structure (a watch-booth?) on a hill 50 m south of Nahal Yattir.

Pottery: Roman-Byzantine.

Unillustrated pottery:

- (1–4) Four body fragments, two of which are quite large, belonging to the same storejar. Ribbed, yellow-brown ware.
- (5–6) Two cooking ware body fragments belonging to the same cooking pot. Very thin, brittle, ribbed, orange-brown cooking ware.

Summary: All of this material looks early Roman (1c).

166. 44/2 (p. 72*)

Nahal So'a. These are structures lying along a moderate spur. The western structure is square (a farmstead?). In its north are four adjoining rectangular rooms, with two adjoining courtyards to their south. Twelve adjoining rooms comprising a 50 m long structure lie on the southern slope of the spur. An irregular courtyard adjoins the four eastern rooms. Some 20 m northeast of this structure is a rectangular, two-room structure entered from the south. Agricultural terraces are located in the wadi south of the spur.

Pottery: Byzantine.

Unillustrated pottery:

- (1–2) Two casseroles; handle fragments.
- (3–4) Two cooking pots; handle fragments. Look early Roman.
- (5–6) Two cooking pots; rim fragments of same type (may belong to same vessel). Thin, dark orange-brown cooking ware.
- (7) Cooking pot; rim fragment. Thin, brittle, red-brown cooking ware; purple slip on exterior.
- (8–10) Three cooking ware body fragments.
- (11–12) Storejars; handle fragments.
- (13–16) Four jars; body fragments. Three belong to ribbed storejars; one may belong to an amphora.
- (17) Jar; large, flat base fragment. Very coarse. Looks earlier than Roman.

Summary: Except for no. 17, this pottery could be Byzantine, but at least some of it could also be early to late Roman.

167. 44/3 (p. 72*)

Nahal So'a. This is an L-shaped farmstead on a spur, with rows of adjoining rooms along its northern and western sides. A partly-hewn cave lies to the east. A shaft hewn into its roof indicates that it was used as a cistern. Along the ends of the spur, to the south and east, halfway up the slope, are the remains of a 300 m long retaining wall (a conduit?).

Pottery: Byzantine.

Illustrated pottery (p. 110):

- (1) Bowl; rim fragment. Hard-fired, red-brown ware (2.5YR5/4); dark red slip (2.5YR4/8) and burnish over all; some tiny-large white grits. Late Roman "C" Form 3, dated mainly second half of 5c to first half of 6c.¹⁰⁴

104. Hayes, *LRP*, 329–38.

- (2) Jug; small fragment of ring base. Thick grey core, fired light brown (7.5YR5/3) on interior and red-brown (2.5YR5/6) on exterior; a few tiny-small white grits.
- (3) Bowl; fragment of ring base. Thick, heavy ware; thick grey core, fired red-brown (2.5YR5/6) at surfaces; some tiny-very large white grits.
- (4) Cooking pot; rim fragment; est dia 10. Red-brown cooking ware (2.5YR4/6); some tiny white and dark grits and glistening flecks.
- (5) Wheelmade ("Persian") oil lamp; nozzle—not found.¹⁰⁵

Unillustrated pottery:

A box contains 8 undrawn sherds: 1 storejar rim of orange-brown ware; 3 jar or storejar body fragments; 2 cooking ware body fragments; one cooking pot rim and handle fragment;¹⁰⁶ 1 storejar handle fragment.

Summary: All of this pottery looks Byzantine (5c/6c–7c).

169. 54/3 (p. 73*)

Nahal Molada. This is a farmstead on a moderate slope, 400 m north of Nahal Molada. In its center are adjoining rectangular rooms flanked on the north and south by courtyards. The northern side of the structure is bordered by a straight wall. There is a square room on its northwestern end, and a cluster of rooms on its southeastern end. Some 10 m southwest of the farmstead is a square structure.

Pottery: Roman-Byzantine.

Unillustrated pottery:

- (1) Bowl; rim fragment. FBW Bowls Form 1E, dated 8c–9c.¹⁰⁷
- (2) Bowl; base fragment. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹⁰⁸
- (3–5) Three cooking ware body fragments.
- (6–9) Four jar body fragments, three of which are smooth, while the fourth is ribbed.

Summary: All of the diagnostic pieces here are 8c–9c, not Byzantine.

170. 54/1 (p. 73*)

Nahal Molada. This is a farmstead on a moderate slope 300 m north of Nahal Molada. In its center are several adjoining rooms surrounded by small courtyards. Near the southeastern corner of the structure is a hewn cistern with a conduit leading to it from the south. Some 25 m east of the farmstead is a square structure. Several adjoining rooms and courtyard lie to the east. Nearby are several architectural elements, including a dressed limestone lintel and a limestone basin.

Pottery: Roman-Byzantine.

Unillustrated pottery:

- (1) Cooking pot; fragment of handle. Gritty, red-brown cooking ware. Looks Byzantine.
- (2) Storejar; body fragment. Ribbed, orange-brown ware.

Summary: This pottery is probably Byzantine (5c–7c).

105. Magness, *JCC*, 129; 146, fig. 3:5–6, dated 6c–7c; Rosenthal and Sivan, *Ancient Lamps*, 122–23.

106. Magness, *JCC*, 219–20, Cooking Pots Form 4B or 4C, dated 5c/6c to late 7c/early 8c.

107. *Ibid.*, 193–96.

108. *Ibid.*

174. 64/3 (p. 74*)

Harei ʿAnim. This is a rectangular fortress (31 × 34 m) atop a hill, 500 m south of the Shoqet Junction–ʿArad road, with an entrance in the eastern wall. Several inner walls are preserved near the northeastern corner. A pen built of stones in secondary use is located in the northeastern corner of the fortress.

Pottery: Persian(?), Roman-Byzantine.

Unillustrated pottery:

- (1) Jar; handle. Buff ware.
- (2–3) Cooking pots. Handle fragments.
- (4) Casserole. Handle fragment.
- (5) Jar or jug. Low ring base fragment.
- (6–7) Two cooking ware body fragments.
- (8–14) Seven jar or storejar body fragments, three of which are ribbed.

Summary: This all looks early Roman (1c); there is nothing that is clearly Byzantine.

183. 84/1 (p. 76*)

Nahal ʿAnim. This is a rock-hewn cistern on the western bank of Nahal ʿAnim, 300 m southeast of a hilltop. To the west are the remains of a structure.

Pottery: Roman-Byzantine.

Unillustrated pottery:

- (1–2) Two tiny casserole lid fragments. Thin, red-brown cooking ware.
- (3–4) Two small cooking pot loop handles (early Roman).
- (5–6) Two tiny cooking pot body fragments.
- (7–9) Three small storejar body fragments, all of which are ribbed (two with thin ribbing, one with wider ribbing) and are of light orange-brown ware.

Summary: Some of this pottery is definitely early Roman, and some could be Byzantine.

184. 84/3 (pp. 76*–77*)

Nahal ʿAnim. This is a farmstead in a small wadi, 80 m south of the Shoqet Junction–ʿArad road. In its center are three adjoining terraced courtyards. In the central courtyard is a partly natural, partly hewn cave. There is a square room in the lowest courtyard. A room adjoins the structure from the south. To the west of the central structure is a building consisting of rooms arrayed around a central courtyard. Northeast of this unit are two adjoining rooms. To the east is a rectangular unit consisting of rooms in its north and west and the adjoining courtyard. On the surface are architectural fragments, including limestone lintels and a large, stone basin. To the north of the eastern wing is an oval depression, apparently the remains of a collapsed cistern. A stone fence surrounds the farmstead and continues on the far side of the wadi.

Pottery: Byzantine.

Illustrated pottery (p. 120):

- (1) Bowl; large fragment of flat base. Smooth, very hard-fired ware; thick grey core, fired streaky orange-brown (5YR6/6) and grey-brown at surfaces; pare-burnished in strips on exterior, including on bottom of base; part of incised concentric groove in center of bottom of base on exterior; a few tiny-small white grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹⁰⁹

109. Ibid.

- (2) I did not find this piece, but from the illustration it appears to be the same type of cooking pot as the next one (no. 3).
- (3) Cooking pot; tiny rim fragment. Gritty, dark red cooking ware (10R4/4); dark grey core; many tiny white grits; a few glistening flecks. Cooking Pots Form 4C, dated 5c/6c to late 7c/early 8c.¹¹⁰
- (4) Casserole lid; tiny rim fragment. Gritty, dark red cooking ware (10R4/4); many tiny white and dark grits. Casserole Lids, dated late 3c/early 4c to 9c/10c.¹¹¹
- (5) Casserole; large body fragment. Gritty, thick, red-brown cooking ware (2.5YR4/6); dark red slip (2.5YR4/4) on exterior; no ribbing; many tiny-medium white grits; a few glistening flecks.

Unillustrated pottery:

- (1) Jar; small rim fragment; est dia 7. Thick, soft, orange ware (2.5YR5/6); some tiny-small white grits; some tiny glistening flecks of gold mica.
- (2) Cooking pot; small rim and handle fragment. Red-brown cooking ware (Byzantine or early Islamic).
- (3–11) Nine casserole handle fragments (all look Byzantine).
- (12) Storejar; handle (Byzantine).
- (13) Pithos; handle (looks early Islamic).
- (14) Jar; fragment of very flat strap handle.
- (15–16) Two cooking ware body fragments; one looks Byzantine; the other is very thick and brown and not ribbed—looks early Islamic.
- (17–22) Seven jar or storejar body fragments, four of which are ribbed; one is from a thick, smooth jar or pithos, and one has a horizontal combed band.

Summary: There is Byzantine (5c/6c–7c) and early Islamic (8c–9c) pottery here. However, the most diagnostic pieces are all early Islamic; the “Byzantine” cooking wares could be 8c or later.

185. 84/4 (p. 77*)

Nahal ʿAnim. These are structures and natural caves on the eastern slope of a spur, 200 m south of the Shoqet Junction–ʿArad road. The caves are closely clustered on several levels. The site is fronted by a leveled area delimited by a wall. Along the northern side of the area are three square adjoining rooms; additional rooms appear to have abutted the eastern wall. In the center of the complex is a rectangular courtyard. A boundary fence to the north, on the lower slopes, descends almost to the wadi.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Casserole; handle and wall fragment. Thin, gritty, orange-red cooking ware; dark purple slip on exterior. Looks Byzantine.
- (2) Cooking pot; small rim and handle fragment. Gritty, red-brown cooking ware. Cooking Pots Form 4, dated 5c/6c to late 7c/early 8c.¹¹²
- (3) Bowl; body fragment. Indeterminate Late Roman Red Ware.
- (4) Cooking pot; rim and flat handle fragment. Coarse, gritty, dark orange-brown ware. Looks early Islamic.
- (5) Bowl; body fragment. Grey core, fired dark brown on exterior and streaky orange-brown on interior; pare-burnished on exterior. FBW Bowls Form 1D or 1E, dated late 7c/early 8c to 9c/10c.¹¹³
- (6) Jar or jug; large flat base fragment. Gritty, orange-brown ware; light brown slip on exterior; string-cut base; many tiny–very large white grits. Looks early Islamic.

110. *Ibid.*, 219–21.

111. *Ibid.*, 215.

112. *Ibid.*, 219–21.

113. *Ibid.*, 193–96.

- (7) Storejar; neck and shoulder fragment. Coarse, dark orange-brown ware.
 (8) Jar; handle. Orange-brown ware. Looks early Islamic.
 (9–14) Jars; body fragments. Three are ribbed; one has horizontal and wavy combed bands; one is of very thick cooking ware.

Summary: There is Byzantine (5c/6c–7c) pottery here, but there also appears to be a substantial amount of 8c–9c pottery.

186. 84/5 (p. 77*)

Nahal 'Anim. This is a rectangular structure (a watch-booth?) on a mound, 200 m south of the Shoqet Junction–'Arad road. There are remains of agricultural terraces in the area.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Bowl; rim fragment; est dia 24. Worn, orange-brown ware (5YR6/6); dark red slip (2.5YR4/4) and burnish over all; many tiny-small white grits; a few tiny flecks of gold mica. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.¹¹⁴
- (2–4) Three ribbed storejar body fragments, all of fairly smooth, thick ware. Two are light orange-brown and the third is yellow-brown.
- (5) One dark red-brown jar body fragment; probably a Gaza amphora.

Summary: All of this pottery looks Byzantine (5c/6c–7c).

187. 94/2 (pp. 77*–78*)

Nahal 'Anim. These are structures on a spur, 300 m east of Nahal 'Anim. One is a rectangular structure (A). To its east is a rectangular storeroom, which presently serves as a pen for Bedouin flocks. A hearth was noted in its cross-section. To the north are the remains of structure B, and a circular structure.

Pottery: Byzantine.

Pottery not found.

188. 94/1 (p. 78*)

Nahal 'Anim. This is a rectangular structure on the lower slope of a spur descending from Harei 'Ira to Nahal 'Anim. The remains of two rectangular, rock-hewn cisterns lie to the southeast.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Storejar; large rim and neck fragment; est dia 9. Thick, heavy, smooth, orange-brown ware (5YR6/6); some tiny–very large white grits. Storage Jars Form 6B, dated late 6c/7c to 8c.¹¹⁵
- (2) Bowl; fragment of flat base. Smooth, very hard-fired ware; thick grey core; fired light brown (5YR6/4) at surfaces, with grey streaks on interior; pare-burnished in strips on exterior including on bottom of base, creating brown color on the exterior (5YR5/4); part of concentric groove preserved in center of bottom of base on exterior; a few tiny white grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹¹⁶
- (3) Bowl; tiny body fragment. Smooth, thin, orange-brown ware, burnished on exterior. FBW Bowls, indeterminate form.

114. Hayes, *LRP*, 329–38.

115. Magness, *JCC*, 227–30.

116. *Ibid.*, 193–96.

There is also a box containing many storejar and cooking ware body fragments from this site.

Summary: The pottery from this site looks 8c–9c, not Byzantine.

189. 03/1 (p. 78*)

Nahal Yattir. This is a square structure (a pen?) on a moderate slope west of Nahal Yattir. The entrance is on the northern side.

Pottery: Byzantine.

Pottery not found.

192. 23/1 (p. 79*)

Nahal Molada. This is a rectangular structure with a central courtyard, with a square room in its southwest corner, on the edge of a narrow spur, near Nahal Molada. Another rectangular structure partitioned into two rooms lies near Nahal Molada.

Pottery: Byzantine.

Illustrated pottery (p. 122):

The three pieces illustrated on p. 122 were not found. From the drawings, they appear to be

- (1) A Byzantine bowl.
- (2) An amphora, dated early 5c to mid-7c.¹¹⁷
- (3) A southern Judean basin of yellow ware, dated 6c–7c.¹¹⁸

Unillustrated pottery:

- (1–2) Two different African Red Slip Ware bowl body fragments.
- (3) Bowl; body sherd. Smooth, very hard-fired, dark red-brown ware; rouletting on exterior. It looks like Cypriot Red Slip Ware,¹¹⁹ but has a horizontal, $\frac{1}{3}$ inch wide, white-painted line on the interior. Recent?
- (4) Bowl; tiny rim fragment. Thin, smooth, hard-fired ware; light grey core; fired streaky orange-brown at surfaces. FBW Bowls Form 1E, dated 8c–9c.¹²⁰
- (5) Bowl; flat base fragment. Smooth, hard-fired, grey-brown ware; two incised concentric grooves in center of outside of base. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹²¹
- (6) Bowl; rim and wall fragment. Porous, yellow-white ware. A local imitation of FBW Bowls Form 1E.¹²²
- (7) Jar; tiny fragment of base of neck with strainer. Pink ware with white slip. Fine buff (“Mefjer”) ware, dated early Islamic.¹²³
- (8) Bowl; tiny body fragment. FBW.
- (9–13) Five cooking ware body fragments.
- (14–27) Fourteen storejar body fragments, 11 of which are ribbed.

Summary: Much of this looks Byzantine (5c/6c–7c), but there is also some 8c–9c material.

117. See Peacock and Williams, *Amphorae and the Roman Economy*, 185–87, Class 44.

118. See Magness, *JCC*, 160.

119. See Hayes, *LRP*, 371–86.

120. Magness, *JCC*, 193–96.

121. *Ibid.*

122. *Ibid.*, dated 8c–9c.

123. Avissar, “The Medieval Pottery,” 156; Type 2.

193. 23/2 (p. 79*)

Nahal Molada. These are the remains of two square structures on the southern slope of a spur descending to the southwest from H. Yittan. On the western side of the northern structure is a rectangular room. Rooms adjoin the entire length of the western side of the southern structure.

Pottery: Byzantine.

Pottery not found.

194. 23/3 (p. 79*)

Nahal Molada. This is a rectangular structure on a spur descending from H. Yittan to the southwest. Along the eastern side are several rooms.

Pottery: Byzantine.

Pottery not found.

197. 63/1 (p. 80*)

Nahal 'Anim. This site consists of a rectangular cistern and granaries hewn in the bank of a tributary of Nahal 'Anim. A hewn conduit leads to the cistern from the wadi. East of the cistern is a granary with a square, supporting column in its center and a circular shaft in its ceiling leading to the surface. Another shaft is hewn near its southern corner, leading to a subterranean level. Two more hewn granaries lie to the east.

Pottery: Roman-Byzantine.

Pottery not found.

198. 73/1 (pp. 80*–81*)

Be'er Tarshan. These are the remains of structures, cisterns, wells and granaries, along 300 m on both banks of Nahal 'Anim. On the slope descending to Nahal 'Anim is a farmstead. There are courtyards in the western side of the structure. A circular installation lies in the center of a large, central courtyard. Square rooms adjoin the northwest and southwest corners of the courtyard. A rectangular structure partitioned into two rooms lies to the south of the farmstead. It has an entrance in the western side. To the south of this structure, on the edge of a cliff overlooking Nahal 'Anim, is a rectangular structure, unequally partitioned into two rectangular rooms. On a low hill to the south of the wadi is a rectangular fort, commanding the wells and cisterns in the wadi. The entrance is in the eastern wall. A rock-hewn well lies on the western bank of Nahal 'Anim, 4 m above the wadi. There are two more rock-hewn wells to the south, on the eastern bank of the wadi. A rock-hewn cistern lies on the western bank, opposite the wells, with a hewn conduit leading to it. Another cistern is located to the east, on the northern bank. A rectangular, rock-hewn granary is located on the western cliff above the wadi. It has ashlar-built lintels and a central supportive column. Nearby, on the slopes descending from the north to Nahal 'Anim, is a scattering of numerous flint implements and flakes.

Pottery: Roman, Byzantine–Early Arab.

Illustrated pottery (p. 128):

- (1) Bowl; tiny rim fragment; est dia 6. Smooth, hard-fired ware. Thick grey core, fired streaky grey and orange-brown (5YR6/6) at surfaces; a few tiny-small white grits. FBW Bowls Form 1E, dated 8c–9c.¹²⁴

124. Magness, *JCC*, 193–96.

- (2) Bowl; rim fragment; est dia 8. Smooth, hard-fired ware. Thick grey core, fired orange-brown (5YR6/6) at surfaces; thin, light, widely-spaced, burnished bands on exterior; a few tiny-small white grits. FBW Bowls Form 1E, dated 8c–9c.¹²⁵
- (3) Casserole or lid; rim fragment (illustrated backward; the beveling faces inward). Thin, gritty, dark purple cooking ware (10R3/1), fired dark red-brown (10R4/3) on exterior; many tiny-small white grits.
- (4) Bowl(?); thick, heavy, rim fragment; est dia 18. Soft, smooth ware; thick grey-brown core; fired orange-brown (5YR6/6) at surfaces; light brown slip (7.5YR6/4) on exterior; some tiny-small white grits.
- (5) Bowl; rim fragment; est dia 20. Smooth, hard-fired ware; thick light grey core, fired orange-brown (5YR6/6) at surfaces; light brown slip (7.5YR6/4); a few tiny white grits.
- (6) Basin; thick, very heavy rim fragment; est dia 50. Coarse, gritty ware; thick brown core, fired red-brown (2.5YR6/6) at surfaces; light red-brown slip (2.5YR6/4) on exterior; horizontal grooves on exterior of rim; many tiny-large white grits.
- (7) Jug or juglet; tiny rim fragment; est dia 6. Hard-fired, gritty, yellow-brown ware (10YR7/3); many tiny dark grits.
- (8) Cooking pot; small rim fragment; est dia 8. Brittle, gritty, dark red-brown cooking ware (10R4/3); many tiny-medium white grits.
- (9) Storejar; rim and neck fragment; est dia 9. Hard-fired, coarse but smooth, red-brown ware (2.5YR4/3); thick dark brown core; many tiny-small white grits. Storage Jars Form 7, dated late 7c to 9c/10c.¹²⁶

Unillustrated pottery:

- (1–2) Two cooking pots; rim and handle fragments. Both look Byzantine.
- (3) Casserole; rim and handle fragment.
- (4–10) Seven casseroles; handle fragments.
- (11) Cooking pot; handle fragment.
- (12–15) Four cooking ware body fragments.
- (16–17) Two storejars; handle fragments.
- (18) Horizontal handle, like a casserole, but of storejar ware, not cooking ware. Grey-brown ware, fired pink-brown on exterior.
- (19–25) Seven storejar body fragments; one with wavy combing, one with horizontal combing, and three with ribbing.
- (26) Storejar; rim fragment. Thick, smooth, pink-brown ware (2.5YR5/6); some tiny white and dark grits.
- (27) Bowl; flat base fragment. Smooth, very hard-fired ware; thick grey core, fired dark orange-brown (2.5YR5/4) at surfaces; pare-burnished over exterior including on bottom of base; incised circle on bottom of base; a few tiny white grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹²⁷

Summary: There is no Roman material here. All of the diagnostic pieces are 8c–9c. Some of the other pieces could be either Byzantine or early Islamic, and a few could even be later (such as illustrated nos. 4–6)

201. 93/1 (p. 82*)

Nahal Segor. These are the remains of structures (a farmstead?) on a moderate slope, 500 m east of the confluence of Nahal 'Anim and Nahal Segor. The main structure consists of three rooms arranged around a central courtyard. Nearby is part of a structure, apparently of later date; only its southern corner remains. To the south of the main structure is a rectangular, two-room structure.

Pottery: Byzantine.

125. *Ibid.*

126. *Ibid.*, 230–31.

127. *Ibid.*, 193–96.

- (2) Bowl; rim fragment; est dia 8. Smooth, hard-fired ware. Thick grey core, fired orange-brown (5YR6/6) at surfaces; thin, light, widely-spaced, burnished bands on exterior; a few tiny-small white grits. FBW Bowls Form 1E, dated 8c–9c.¹²⁵
- (3) Casserole or lid; rim fragment (illustrated backward; the beveling faces inward). Thin, gritty, dark purple cooking ware (10R3/1), fired dark red-brown (10R4/3) on exterior; many tiny-small white grits.
- (4) Bowl(?); thick, heavy, rim fragment; est dia 18. Soft, smooth ware; thick grey-brown core; fired orange-brown (5YR6/6) at surfaces; light brown slip (7.5YR6/4) on exterior; some tiny-small white grits.
- (5) Bowl; rim fragment; est dia 20. Smooth, hard-fired ware; thick light grey core, fired orange-brown (5YR6/6) at surfaces; light brown slip (7.5YR6/4); a few tiny white grits.
- (6) Basin; thick, very heavy rim fragment; est dia 50. Coarse, gritty ware; thick brown core, fired red-brown (2.5YR6/6) at surfaces; light red-brown slip (2.5YR6/4) on exterior; horizontal grooves on exterior of rim; many tiny-large white grits.
- (7) Jug or juglet; tiny rim fragment; est dia 6. Hard-fired, gritty, yellow-brown ware (10YR7/3); many tiny dark grits.
- (8) Cooking pot; small rim fragment; est dia 8. Brittle, gritty, dark red-brown cooking ware (10R4/3); many tiny-medium white grits.
- (9) Storejar; rim and neck fragment; est dia 9. Hard-fired, coarse but smooth, red-brown ware (2.5YR4/3); thick dark brown core; many tiny-small white grits. Storage Jars Form 7, dated late 7c to 9c/10c.¹²⁶

Unillustrated pottery:

- (1–2) Two cooking pots; rim and handle fragments. Both look Byzantine.
- (3) Casserole; rim and handle fragment.
- (4–10) Seven casseroles; handle fragments.
- (11) Cooking pot; handle fragment.
- (12–15) Four cooking ware body fragments.
- (16–17) Two storejars; handle fragments.
- (18) Horizontal handle, like a casserole, but of storejar ware, not cooking ware. Grey-brown ware, fired pink-brown on exterior.
- (19–25) Seven storejar body fragments; one with wavy combing, one with horizontal combing, and three with ribbing.
- (26) Storejar; rim fragment. Thick, smooth, pink-brown ware (2.5YR5/6); some tiny white and dark grits.
- (27) Bowl; flat base fragment. Smooth, very hard-fired ware; thick grey core, fired dark orange-brown (2.5YR5/4) at surfaces; pare-burnished over exterior including on bottom of base; incised circle on bottom of base; a few tiny white grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹²⁷

Summary: There is no Roman material here. All of the diagnostic pieces are 8c–9c. Some of the other pieces could be either Byzantine or early Islamic, and a few could even be later (such as illustrated nos. 4–6).

201. 93/1 (p. 82*)

Nahal Segor. These are the remains of structures (a farmstead?) on a moderate slope, 500 m east of the confluence of Nahal 'Anim and Nahal Segor. The main structure consists of three rooms arranged around a central courtyard. Nearby is part of a structure, apparently of later date; only its southern corner remains. To the south of the main structure is a rectangular, two-room structure.

Pottery: Byzantine.

125. *Ibid.*

126. *Ibid.*, 230–31.

127. *Ibid.*, 193–96.

Unillustrated pottery:

- (1) Cooking pot; rim and handle fragment; est dia 16? Gritty, red-brown cooking ware; many tiny-large white grits. Looks Byzantine or early Islamic.
- (2–3) Two cooking ware body fragments. One is ribbed; the other is of thick, smooth, dark red-brown cooking ware.
- (4) Storejar; neck and shoulder fragment. Thick, orange-brown ware; yellow-brown slip on exterior; ridge at base of neck; combing on shoulder. Looks early Islamic.
- (5) Storejar; neck and shoulder fragment. Smooth, very hard-fired ware; thick grey core, fired grey-brown at surfaces; a few tiny-medium white grits. Looks early Islamic.
- (6) Jar; body fragment. Smooth, dark orange-brown ware; light brown slip on exterior; horizontal and wavy combed bands on exterior.
- (7–8) Two jar or storejar body fragments; one of which is combed and the other is ribbed.

Summary: Though these are not particularly diagnostic sherds, they look early Islamic (8c–9c), not Byzantine.

204. 02/2 (p. 82*)

Nahal Yattir. This is a dam across Nahal Yattir. There are remains of walls on a terrace nearby.

Pottery: Byzantine.

Pottery not found.

205. 02/3 (p. 83*)

Nahal Yattir. This is an extensive settlement on the northwestern bank of Nahal Yattir, 330 m above sea level. Two phases were discerned: an unwalled Iron Age I settlement, and a Persian period fortress and structures.

Pottery: Iron I, Persian.

Govrin conducted excavations here in 1986–90; for references, see p. 83*.

Unillustrated pottery:

A box contains sherds, some of which are marked with red dots and were therefore drawn. All of them are Iron Age or Persian, except for the following:

- (1) Bowl; flat base fragment. Thick grey core, fired dark orange at surfaces; pare-burnished in strips on exterior; incised concentric groove on bottom of base on exterior. No visible grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹²⁸
- (2) Storejar; rim fragment. Thick grey core, fired light orange-brown at surfaces; light brown slip on exterior; many tiny and a few large white grits. Perhaps Ottoman Turkish.

Summary: There is a little 8c–9c pottery here.

206. 02/4 (pp. 83*–84*)

Nahal Yattir. This is a bell-shaped, rock-hewn cistern near a tributary of Nahal Yattir, some 50 m north of Site 205. Byzantine sherds are mixed in with the plaster. Nearby is a plastered trough. To the north are two circular depressions, apparently the remains of collapsed or incomplete cisterns.

Pottery: Byzantine.

128. Ibid.

Unillustrated pottery:

There is a large box of sherds, some of which are marked with red dots and were therefore drawn. But none of them is Roman, Byzantine, or early Islamic. Instead, some of the sherds are Late Bronze and Iron Age, and others are Ottoman Turkish.

207. 02/5 (p. 84*)

Nahal Yattir. This is a square fort on a hilltop overlooking Nahal Yattir, commanding the road along the wadi bank. The entrance is to the north. North of the structure is a rectangular courtyard. Some 30 m east of the fort, near an unpaved road, are structures and courtyards. The main structure contains two equal-sized units. Near its southeast corner is a rectangular room. The entrance to the terraced courtyards is from the north. A rectangular structure lies to the southeast.

Pottery: Roman-Byzantine.

Unillustrated pottery:

- (1) Cooking pot; rim and handle fragment. Dark brown cooking ware. Cooking Pots Form 4B (?), dated 5c/6c to late 7c/early 8c.¹²⁹
- (2) Storejar; infolded rim fragment. Orange-brown ware. Similar to Storage Jars Form 4C, dated late 6c to 7c.¹³⁰
- (3) Jar or bowl; rim fragment. Smooth, hard-fired, light orange-brown ware. Like FBW.
- (4) Bowl; rim fragment. Smooth, orange-brown ware.
- (5–6) Two storejars; handles.
- (7) Cooking ware body fragment.
- (8) Jar or amphora or pithos; two joining pieces of handle.
- (9–13) Five jars or storejars; body fragments. Two are ribbed; one has a band of horizontal combing.

Summary: This pottery all looks Byzantine (5c/6c–7c).

210. 52/3 (p. 85*)

Nahal ʿAnim. This is a fort on a hilltop, dominating its surroundings. There is a paved threshold near the northeastern corner. In the center of the fort courtyard is a rectangular structure. To the east of the fort is a rectangular courtyard.

Pottery: Roman.

Illustrated pottery (p. 133):

Note: All of the sherds are covered with dirt, but the fabric in general is a soft, light brown to orange-brown ware.

- (1) Jar; rim fragment.
- (2) Storejar; rim fragment; est dia 10. Many small-large dark grits. Storage Jars Form 5A, dated late 6c to early 8c.¹³¹
- (3) Storejar; rim fragment; est dia 8. Storage Jars Form 5A, dated late 6c to early 8c.¹³²
- (4) Jar; rim and handle fragment.
- (5) Amphora; neck and handle fragment. Amphorae Class 44, dated early 5c to mid-7c.¹³³

129. *Ibid.*, 219–21.

130. *Ibid.*, 223–35.

131. *Ibid.*, 226.

132. *Ibid.*

133. Peacock and Williams, *Amphorae and the Roman Economy*, 185–87.

- (6) Juglet; tiny rim fragment; est dia 3. Buff ware.
- (7) Juglet; rim and neck; est dia 1.5. Similar to FBW Jars, Jugs and Juglets Form 2A, dated mid-6c to early 8c.¹³⁴

Unillustrated pottery:

- (1-2) Two storejar handles.
- (3) Cooking pot with handle attachment. Looks Byzantine.
- (4) Cooking ware body fragment.
- (5-23) Nineteen storejar or jar body fragments, six of which are ribbed.

Summary: This pottery all looks Byzantine (5c/6c-7c).

211. 52/2 (p. 85*)

Nahal 'Anim. These are the remains of a settlement, razed to the foundations, on a moderate slope descending from the north to Nahal 'Anim. Stone heaps indicate that the settlement comprised between twelve and fifteen structures. Among the remains are limestone column drums.

Pottery: Byzantine, Early Arab.

Illustrated pottery (p. 134):

- (1) Bowl; rim and wall fragment; est dia 15. Thin, smooth, hard-fired ware. Thin grey core, fired streaky orange-brown (2.5YR6/6) and grey at surfaces; no visible grits. FBW Bowls Form 1E, dated 8c-9c.¹³⁵
- (2) Jar; rim fragment; est dia 7. Thick, friable, green-yellow ware (5Y6/3); some tiny-small dark grits. Early Islamic or later?¹³⁶
- (3) Jar; rim fragment; est dia 7. Coarse, thick, orange-brown ware (7.5YR6/4); some tiny-very large white and dark grits.
- (4) Jar; body fragment. Moldmade. Thin, hard-fired, yellow-white ware (10YR8/3); delicate relief designs on exterior; no visible grits. Buff ("Mefjer") ware, dated second half of 8c on.¹³⁷

Unillustrated pottery:

- (1) Bowl; flat base fragment. Smooth, very hard-fired ware. Thick grey core, fired brown (5YR5/4) at surfaces; burnished on exterior including on bottom of base; a few tiny white grits. FBW Bowls Form 1D or 1E, dated late 7c to 9c/10c.¹³⁸
- (2) Small jar; tiny rim fragment.
- (3) Jug; rim fragment.
- (4) Jar; handle. Light yellow ware.
- (5) Casserole; handle fragment.
- (6) Mortarium or pithos; handle. Thick, soft, heavy, orange-brown ware; ridged on top.
- (7) Storejar; handle. Gaza amphora?
- (8-9) Two cooking ware body fragments.

Summary: There are no diagnostic Byzantine sherds here, although some of the nondiagnostic pieces, such as the possible Gaza amphora handle and the casserole handle could be Byzantine. All of the diagnostic pottery is early Islamic (8c-10c) and perhaps even later.

134. Magness, *JCC*, 239-40.

135. *Ibid.*, 193-96.

136. See Avissar, "The Medieval Pottery," 153; Type 14, dated Crusader-Mamluke.

137. Sauer and Magness, "Ceramics of the Islamic Period," 477-78; also see Avissar, "The Medieval Pottery," 158-59; Type 6.

138. Magness, *JCC*, 193-96.

216. 62/1 (p. 86*)

Nahal 'Anim. This is a farmstead comprising two units, on a narrow spur north of the confluence of Nahal 'Anim with Nahal Beriah. The southern unit consists of 20 rooms arranged around a courtyard. The entrance is from the south, through a 15 m-long corridor that leads to a courtyard. The northern unit consists of several adjoining courtyards, abutted by rectangular rooms. The entranceways and lintels are ashlar-built.¹³⁹ A bell-shaped, rock-hewn cistern lies near the confluence of the wadis. To the east of Nahal Beriah are the remains of structures.

Pottery: Iron II, Early Arab.

Illustrated pottery (p. 135):

- (4) Cup; small rim fragment; est dia 9. Hard-fired, light yellow ware (10YR8/4); band of horizontal combing on exterior below rim; a few tiny-small dark grits. A locally-produced variant of FBW Bowls Form 1E, dated 8c–9c.¹⁴⁰
- (5) Bowl; small rim fragment; est dia 6. Grey core; light orange-brown ware (5YR6/6) with grey streaks on surfaces; a few tiny-medium white and dark grits. FBW Bowls Form 1E, dated 8c–9c.¹⁴¹
- (6) Bowl; small rim fragment; est dia 11. Thin, smooth, hard-fired ware; thick grey core, fired streaky grey and brown (7.5YR5/3) at surfaces; no visible grits. FBW Bowls Form 1E, dated 8c–9c.¹⁴²
- (7) Jar; tiny rim fragment; est dia 8. Light yellow ware (10YR8/4); some tiny dark grits.
- (8) Jar; neck and shoulder fragment. Very hard-fired ware; thick grey core, fired orange-brown (5YR5/4) on interior and streaky grey and brown (7.5YR5/3) on exterior; part of an incised gash on shoulder; a few tiny-small white grits. In form, this resembles FBW Jars, Jugs and Juglets Form 1B, dated mid-6c to early 8c, but the fabric looks early Islamic.
- (11) Jar; body fragment. Moldmade. Light yellow ware (too dirty to Munsell); delicate relief designs on exterior. Buff (“Mefjer”) ware, dated second half of 8c on.¹⁴³

Note: I did not find illustrated pieces 9 and 10, but they are clearly the same type as no. 11.

Unillustrated pottery:

- (1) Bowl; flat base fragment. Smooth, very hard-fired ware. Thick grey core, fired streaky grey and brown (5YR5/4) on exterior and brown on interior; pare-burnished on exterior; part of lightly incised concentric groove in center of bottom of base on exterior; no visible grits. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10.¹⁴⁴
- (2) Casserole; body fragment; coarse, gritty, black, cooking ware; not ribbed.
- (3) Bowl; tiny rim fragment. Worn, green-glazed.
- (4) Cooking pot handle fragment.
- (5–6) Two cooking ware body fragments.
- (7) Jug; shoulder and neck fragment. Soft, orange-brown ware.
- (8) Jar/jug; body fragment. Thin, light yellow ware.
- (9–18) Ten storejar body fragments, of which 7 are ribbed and one has the beginning of a handle.
- (19) Fragment of a basalt grinding stone (mortar).

Summary: All of this pottery looks 8c–9c and some could be even later.

139. A semicircular niche that appears to be a mihrab is visible in the southern wall of a room at the southeastern end of the site; see Govrin, *Map of Nahal Yatir*, 136.

140. Magness, *JCC*, 193–196.

141. *Ibid.*, 193–96.

142. *Ibid.*

143. Sauer and Magness, “Ceramics of the Islamic Period,” 477–78; Avissar, “The Medieval Pottery,” 158–59; Type 6.

144. Magness, *JCC*, 193–96.

229. 41/1 (p. 89*)

Nahal 'Anim. This is a structure on a narrow spur.

Pottery: Byzantine.

Unillustrated pottery:

- (1) Cooking pot; tiny rim fragment. Thin, brittle, dark orange-brown cooking ware, with thick, dark grey core. Similar to Cooking Pots Form 4C, dated 5c/6c to late 7c/early 8c.¹⁴⁵
- (2) Bowl or jar; tiny high ring-base fragment. Thick, smooth, hard-fired, orange-brown ware.
- (3) Bowl; body fragment. Smooth, deep orange-brown ware (2.5YR6/6); burnished on exterior; grey-fired strip on exterior. No visible grits. FBW?
- (4–5) Two cooking ware body fragments.
- (6–13) Eight storejar or jar body fragments, two of which are ribbed.

Summary: Although these pieces are not diagnostic, they look Byzantine (5c/6c–7c).

239. 71/1 (p. 91*)

Harei 'Ira. This is a rectangular farmstead on the western bank of a tributary of Nahal Be'er-sheva'. In its center are two courtyards. The entrance is near the southeastern corner. To the north of the farmstead is a square structure. A Bedouin cemetery, with several tombs constructed of stones robbed from the farmstead, lies on and among the farmstead remains.

Pottery: Byzantine.

Unillustrated pottery:

- (1–2) Cooking pots; handle fragments. Red-brown cooking ware. Look Byzantine.
- (3–7) Five cooking ware body fragments.
- (8–11) Four storejar body fragments; one of which is ribbed.
- (12) Ottoman-Turkish pipe fragment.

Summary: Everything but the pipe fragment looks Byzantine (5c/6c–7c).

Tel 'Ira

First, I present the results of Govrin's survey, followed by a summary of the results of excavations at the site.

240. 81/1 (p. 91*)

Tel 'Ira. This is a tel (30 dunams in area at its summit, 514 m above sea level) overlooking the Be'er-sheva' Basin. Eight phases of settlement were distinguished, beginning with Early Bronze III. The Roman period structures include a large building adjacent to the city wall. A Byzantine period monastery (800 sq. m) dating to the late fourth–early fifth century C.E. was uncovered. A mosaic floor bears an inscription dedicating the structure to St. Peter.

Pottery: Early Bronze III, Iron II, Persian, Hellenistic, Early Roman, Late Roman, Byzantine, and Early Arab.

145. *Ibid.*, 219–21.

Unillustrated pottery (relevant periods only):

There are three large boxes filled with sherds, almost all of which look early Roman or earlier. The only possible later pieces are:

- (1) Jar; ring base fragment. Light yellow ware. Looks early Islamic (8c or later).
- (2) Storejar; rim fragment. Thick, gritty, light brown ware, fired light orange-brown at surfaces, with light brown slip on exterior. Looks Byzantine.
- (3) Storejar; rim fragment. Very hard-fired, smooth, grey ware. Byzantine?
- (4) Cooking ware body fragment.

Summary: The pottery includes Byzantine and early Islamic (5c/6c–8c/9c) pieces. This chronology is confirmed by the following review of the final excavation report on Tel 'Ira.

The Excavations at Tel 'Ira

Excavations were conducted at Tel 'Ira from 1979 to 1987, under the direction of I. Beit-Arieh of Tel Aviv University, and the final report was recently published.¹⁴⁶ Evidence for Byzantine (Stratum II) and early Islamic (Stratum I) occupation was discovered at a number of locations around the tel, including in some of the Iron Age casemate rooms.¹⁴⁷ However, the main occupation of these periods was concentrated at the eastern end of the site, where a Byzantine monastery was established. The twelve rooms of the monastery were arranged in a rectangular complex, on the eastern side of which was an apsidal chapel. The rooms were paved with flagstones or mosaics.¹⁴⁸ Although occupation continued during the early Islamic period (Stratum I), the complex no longer had any ecclesiastical function. Instead, this occupation appears to have been domestic in nature, as indicated by the elimination of the apse and the stone altar in the chapel, the remodeling of rooms and blocking of doorways, the covering of the earlier (Byzantine) floors with earth, and the construction of small installations (apparently for storage) throughout the complex.¹⁴⁹ The excavators noted that the relatively small number of finds recovered, and the absence of evidence for violent destruction or burning indicate that both the Byzantine and early Islamic phases of occupation (Strata II–I) ended with a peaceful abandonment of the site.¹⁵⁰ However, the ceramic evidence (see below) contradicts the excavators' conclusion that there was a break in occupation between the Byzantine and early Islamic strata. Instead, the occupation appears to have continued without interruption from Stratum II to Stratum I, although it changed in character from ecclesiastical to domestic.

The Pottery from the Excavations at Tel 'Ira

The illustrations (plates) of the Byzantine and early Islamic pottery¹⁵¹ from the excavations at Tel 'Ira are organized by area (e.g., Area C, Area E), while the discussion is strictly typological, with no reference to the material's context. The Byzantine and early Islamic types (that is, the pottery from Strata II and I) are presented together. Usually, the same locus numbers were used for both the Byzantine (Stratum II) and early Islamic (Stratum I) levels in each room. This makes it impossible to determine whether the illustrated pottery comes from a Stratum II or Stratum I context. Thus, the pottery can only be described as Byzantine

146. I. Beit-Arieh (ed.), *Tel 'Ira: A Stronghold in the Biblical Negev* (Jerusalem: Graphit, 1999).

147. *Ibid.*, 88.

148. For the monastery, see B. C. Cresson, "The Monastery," in Beit-Arieh, *Tel 'Ira*, 88–96.

149. *Ibid.*, 95–96.

150. *Ibid.*, 96.

151. See M. Fischer and O. Tal, "Byzantine and Early Islamic Periods," in Beit-Arieh, *Tel 'Ira*, 300–345.

or early Islamic on the basis of typological parallels, not its context. The following is a review of selected, chronologically diagnostic types published from Tel 'Ira.

Byzantine Pottery

Most of the imported Late Roman Red Wares from Tel 'Ira consist of Late Roman "C" (Phocean Red Slip Ware) Form 3, dated mainly from the mid-fifth to mid-sixth centuries.¹⁵² There are also a number of pieces of Cypriot Red Slip Ware, representing types dating to the sixth to seventh centuries.¹⁵³ The Fine Byzantine Ware includes bowls, jugs, and juglets dated from the mid-sixth to late seventh centuries.¹⁵⁴ Among the basins is a type with a thickened, incurved rim made of sandy, yellow-brown or yellow ware that is characteristic of southern Judea in the sixth and seventh centuries.¹⁵⁵ The cooking wares include casseroles with wishbone handles of sixth- to seventh-century date.¹⁵⁶ Southern Palestinian bag-shaped storage jars are very common, and Gaza amphoras are well represented.¹⁵⁷ There is also an imported amphora of fifth- to mid-seventh-century date with a red dipinto on the shoulder.¹⁵⁸ There are a number of

152. *Ibid.*, 300–301, with illustration references; see Hayes, *LRP*, 328–38. The apparent absence of LRC 10 (see *ibid.*, 343–46), which dates from the late 6c to mid-7c is interesting, since there is so much other ceramic evidence for occupation at the site at this time. This phenomenon strengthens my suspicion, based on personal examination of material from other sites and the evidence from Galilean synagogues, that LRC 3 dates mainly (in Palestine, at least), to the 6c if not later; see J. Magness, "Redating the Forts at Ein Boqeq, Upper Zohar, and other sites in SE Judaea, and the implications for the nature of the *Limes Palaestinae*," in J. H. Humphrey (ed.), *The Roman and Byzantine Near East, Volume 2: Some Recent Archaeological Research* (Journal of Roman Archaeology Supplementary Series 31; Portsmouth, R.I.: Journal of Roman Archaeology, 1999) 193 n. 20.

153. Fischer and Tal, "Byzantine and Early Islamic Periods," 301, with references.

154. *Ibid.*, 302–3; figs. 6.134:4, 7, 9; 6.135:1; 6.141:5 (I have not included jug and juglet bases in this list); see Magness, *JCC*, 193–95 (FBW Bowls Forms 1A–1B); 236–41 (FBW Jars, Jugs, and Juglets). Fischer and Tal dated the appearance of FBW to the fifth century, apparently following Gichon and disregarding the evidence presented in Magness, *JCC*, 166, for a mid-6c and later date; also see Magness, "Redating the Forts at Ein Boqeq, Upper Zohar, and Other Sites," 191–95.

155. Fischer and Tal, "Byzantine and Early Islamic Periods," 305; figs. 6.129:9; 6.134:20; see Magness, *JCC*, 160. Fischer and Tal misidentified these as Incurved-Rim Basins (see Magness, *JCC*, 210–11). They also misidentified the northern Syrian mortarium in fig. 6.134:23; see Magness, "Late Roman and Byzantine pottery," 130; fig. 58:11; J. A. Blakely, R. Brinkmann, and C. J. Vitaliano, "Roman Mortaria and Basins from a Sequence at Caesarea: Fabrics and Sources," in Vann, *Caesarea Papers*, 194–213; Class 1. For examples of these mortaria in a 6c to early 7c context, see R. H. Smith and L. P. Day, *Pella of the Decapolis, Volume 2: Final Report on The College of Wooster Excavations in Area IX: The Civic Complex, 1979–1985* (Wooster: College of Wooster, 1989) pl. 49:10, 12.

156. Fischer and Tal, "Byzantine and Early Islamic Periods," 305; figs. 6.134:14; 6.137:8; they do not give a reason for their 5c–7c range for this type.

157. *Ibid.*, 309–11, with illustration numbers and references; for a new typology and chronology of Gaza amphoras, see G. Majcherek, "Gazan Amphorae: Typology Reconsidered," in H. Meyza and J. Mlynarczyk (eds.), *Hellenistic and Roman Pottery in the Eastern Mediterranean—Advances in Scientific Studies: Acts of the II Nieborow Pottery Workshop, Nieborow, 18–20 December 1993* (Warsaw: URGA, 1995) 163–78.

158. Misidentified as a local product by Fischer and Tal, "Byzantine and Early Islamic Periods," 312; see Peacock and Williams, *Amphorae and the Roman Economy*, 185–87, Class 44. These amphoras are not uncommon at sites in Palestine; for a complete example with a similar red dipinto, see J. W. Crowfoot and G. M. Fitzgerald, *Excavations in the Tyropoeon Valley, Jerusalem, 1927* (Palestine Exploration Fund Annual 5; London: Palestine Exploration Fund, 1929) pl. 14:29. For an example from the Nestorian monastery at the nearby site of Tel Masos, see n. 175 below; for another from Har Beriah, see n. 181 below. Fragments with red dipinti are also published from Mamshit; see A. Negev, *The Architecture of Mampsis, Final Report, Volume II: The Late Roman and Byzantine Periods* (Qedem 27; Jerusalem: Hebrew University, 1988) 111, fig. 14:232 and 113, fig. 15:239. For more on this type, see the discussion of Mamshit in the chapter on the Negev towns.

wheelmade (“Persian”) oil lamps of the sixth to seventh centuries, and a raised handle belonging to a large candlestick lamp variant.¹⁵⁹ Finally, there is a fragment of a Byzantine mirror plaque,¹⁶⁰ and three fragments of Coptic painted pottery of Byzantine to early Islamic date.¹⁶¹

Early Islamic Pottery

Although most of the pottery published from Tel ‘Ira appears to date to the sixth to seventh centuries, a small number of eighth- to ninth-century types are represented. There is also some chronological overlap; that is, some of the types, such as the early channel-nozzle oil lamps, date to the seventh to eighth centuries. The early Islamic types from Tel ‘Ira include deep, hemispherical FBW cups or bowls of eighth- to ninth-century date,¹⁶² flasks with distinctive ridged necks that are characteristic of the Negev in the seventh and eighth centuries,¹⁶³ and early channel-nozzle oil lamps of seventh- to early-eighth-century date.¹⁶⁴ Finally, there are two examples of stone bowls of eighth- to ninth-century date.¹⁶⁵

The ceramic material indicates that the settlement and monastery at Tel ‘Ira flourished during the sixth to seventh centuries. Occupation continued, though on a smaller scale, through the eighth century, during which time the monastery no longer served its original function. Although some of the ceramic types represented have a range through the ninth century, the absence of other types, such as “Mefjer ware,” glazed pottery, and channel-nozzle oil lamps with a high tongue handle, indicates that the settlement was abandoned by the late eighth to early ninth century. The relatively small quantity of eighth-century types

159. For the wheelmade lamps, see Fischer and Tal, “Byzantine and Early Islamic Periods,” 314, with references; for a 6c–7c date, instead of the 5c–7c date they cite, see Magness, *JCC*, 129; 146, fig. 3:5–6. For the possibility that this type continued into the 8c, see the discussion of the pottery from Nevo’s excavations at Sde Boqer in the chapter on the central Negev. For the raised handle of the large candlestick lamp, see Fischer and Tal, “Byzantine and Early Islamic Periods,” 315–16, fig. 6.122:9; fig. 6.136:5 (here and in the report on the pottery from Har Beriah, “‘En Yarad” should read “Ein Yabrud”); see Magness, *JCC*, 254, Oil Lamps Form 3D, dated mid–6c to late 7c/early 8c.

160. Misidentified as the base of a moulded jug or juglet by Fischer and Tal, “Byzantine and Early Islamic Periods,” 316; fig. 6.142:13; see L. Y. Rahmani, “Mirror-Plaques from a Fifth-Century A.D. Tomb,” *Israel Exploration Journal* 14 (1964) 50–60; G. Avni and U. Dahari, “Christian Burial Caves from the Byzantine Period at Luzit,” in G. C. Bottini, L. Di Segni, and E. Alliata (eds.), *Christian Archaeology in the Holy Land: New Discoveries* (Jerusalem: Studium Biblicum Franciscanum, 1990) 310.

161. Misidentified as local pottery of the Crusader and Mamluke periods by Fischer and Tal, “Byzantine and Early Islamic Periods,” 316; fig. 6.139:2–3, 7; see, for example, R. D. Gempeler, *Elephantine X: Die Keramik römischer bis früharabischer Zeit* (Mainz am Rhein: von Zabern, 1992); M. Egloff, *Kellia: La poterie copte* (Geneva: Librairie de l’université, 1977).

162. Fischer and Tal, “Byzantine and Early Islamic Periods,” 301; fig. 6.132:3–4; see Magness, *JCC*, 194–96, FBW Bowls Form 1E. There is also an FBW cup base with incised concentric circles, dated late 7c to 9c/10c; see Fischer and Tal, “Byzantine and Early Islamic Periods,” fig. 6.132:12; Magness, *JCC*, 196, FBW Bowls Form 1D.

163. Fischer and Tal, “Byzantine and Early Islamic Periods,” figs. 6.131:6; 6.132:6–7; see for example Y. D. Nevo, *Pagans and Herders: A Reexamination of the Negev Runoff Cultivation Systems in the Byzantine and Early Arab Periods* (Jerusalem: IPS, 1991) PPL. 6:6–9. For other parallels, see the discussion of Nevo’s excavations at Sde Boqer in the chapter on the central Negev.

164. Fischer and Tal, “Byzantine and Early Islamic Periods,” 315–16; figs. 6.131:13–14; 6.132:16–17; 6.144:1–2; see Magness, *JCC*, 255–58, Oil Lamps Form 4. The fact that this type predominates at Sde Boqer and at many other early Islamic farmsteads in the Negev suggests that its range should be extended at least to the end of the 8c; see Nevo, *Pagans and Herders*, PPL. 7:1–2, 4–11, and the chapter on the central Negev. Compare the lamp fragment in Fischer and Tal, “Byzantine and Early Islamic Periods,” fig. 6.131:13 (and see p. 316), which appears to be decorated with a Kufic inscription instead of a Greek inscription, with Nevo, *Pagans and Herders*, PPL.7:6.

165. M. Fischer and O. Tal, “Stone Artefacts from the Byzantine Period,” in Beit-Arieh, *Tel ‘Ira*, 421; fig. 10.1:1–2, misdated to the Byzantine period; see Magness, “The Dating of the Black Ceramic Bowl,” 199–206.

suggests that the monastery ceased to function and was replaced by domestic occupation around the late seventh to early eighth century.¹⁶⁶

The ceramic assemblage from Tel 'Ira is closely paralleled by that from the nearby site of Tel Masos, suggesting that the monasteries at both sites are contemporary. Although Tel Masos lies just outside the Yattir region, a discussion of the site is included here because of its geographical proximity to Tel 'Ira and the similarities between their ceramic assemblages.

The Nestorian Monastery at Tel Masos

Tel Masos (Khirbet el-Mashash) lies approximately 12 km (7.5 miles) east of Be'er-sheva', on the north bank of the Be'er-sheva' Valley. Tel 'Ira is located a few kilometers to the northeast, and Tel Malhata is 6 km to the east. Tel Masos does not lie within the area surveyed by Govrin. Three seasons of excavations were carried out at the site from 1972 to 1975 under the direction of Y. Aharoni, V. Fritz, and A. Kempinski, and in 1979 under the direction of A. Kempinski.¹⁶⁷ The latest remains found consisted of a Nestorian monastery on the northern side of the tel, covering an area of some 300 square meters. The monastery was rectangular in plan, with a small entrance and a crypt for burials. The church had a rectangular apse, typical of Syrian churches. The living quarters were built around a rectangular courtyard. The remains of a staircase indicated that the monastery had at least two storeys. Syriac inscriptions incised on stone and wall plaster include verses from the New Testament.¹⁶⁸

The Nestorian monastery was published by V. Fritz, who dated the pottery to the mid-seventh and first half of the eighth century.¹⁶⁹ Except for the central courtyard (L600) and the chapel, all of the rooms contained numerous whole vessels *in situ*. The largest number came from the entry room (L612) and corridor (L631). Only complete or nearly complete vessels are illustrated in the report, and only one example of each type is represented. The Late Roman Red Wares include a number of examples of Cypriot Red Slip Ware Form 9, dated ca. 550 to the end of the seventh century.¹⁷⁰ The other pottery includes many of the

166. In other words, the transition from the excavators' Stratum II to Stratum I should be placed in the late 7c to early 8c.

167. For the final excavation report, see V. Fritz and A. Kempinski, *Ergebnisse der Ausgrabungen auf der Hirbet el-Mšāš (Tēl Māšōš) 1972–1975, Volumes I–III* (Wiesbaden: Harrassowitz, 1983).

168. See V. Fritz, "Das nestorianische Kloster: Die Architektur," in Fritz and Kempinski, *Ergebnisse der Ausgrabungen auf der Hirbet el-Mšāš*, 138–53; P. Maiberger, "Die syrischen Inschriften als Quelle zur Geschichte der Nestorianer in Palästina," in Fritz and Kempinski, *Ergebnisse der Ausgrabungen auf der Hirbet el-Mšāš*, 158–85; A. Kempinski, "Masos, Tel," in E. Stern (ed.), *The New Encyclopedia of Archaeological Excavations in the Holy Land* (henceforth referred to as *NEAEHL*; New York: Simon & Schuster, 1993) 989.

169. V. Fritz, "Das nestorianische Kloster: Die Keramik," in Fritz and Kempinski, *Ergebnisse der Ausgrabungen auf der Hirbet el-Mšāš*, 153–58. The pottery is illustrated in pls. 167–69 in vol. 2.

170. Fritz, "Das nestorianische Kloster: Die Keramik," pl. 167:3–6; see Hayes, *LRP*, 379–83. There is also a complete bowl identified by Fritz as African Red Slip Ware Form 107 (Fritz, "Das nestorianische Kloster: Die Keramik," 155; pl. 167:7; see Hayes, *LRP*, 170–71, dated ca. 600–650). Although this date is reasonable, the rim profile (which is thickened on the top, not the underside), and color of the ware indicate that this is not ARS. In light of the location of Tel Masos, I believe that this piece might represent Egyptian Red Slip "A" Ware (could the grey color be the result of misfiring?), similar to the early-sixth-century Form R illustrated by Hayes (*ibid.*, 391). ERS A is most common in late 6c to 7c contexts in Palestine. It is also possible that this bowl is Cypriot Red Slip Ware Form 8, an uncommon 6c form represented by one example from Tel 'Ira (the example from Masos, however, lacks the characteristic rouletting); see Fischer and Tal, "Byzantine and Early Islamic Periods," fig. 6.134:6; Hayes, *LRP*, 378–79. The apparent absence of LRC, especially Form 3 from the assemblage at Tel Masos is interesting in light of its frequency at nearby Tel 'Ira. Does this reflect differences in trading and acquisition patterns, or is it due to chronological factors (that is, is the monastery at Tel Masos slightly later in date than the one at Tel 'Ira)?

same types represented at Tel 'Ira, such as Fine Byzantine Ware bowls, jugs, and juglets of mid–sixth to late-seventh-century date,¹⁷¹ casseroles with wishbone handles of the sixth to seventh centuries, large candlestick lamps dated from the mid–sixth to late seventh century,¹⁷² flasks of seventh- to eighth-century date,¹⁷³ and wheelmade (“Persian”) oil lamps of the sixth to seventh centuries.¹⁷⁴ There is also an imported amphora of the same type as that with the red dipinto from Tel 'Ira.¹⁷⁵

Because no coins, glass, stone, or other objects (aside from the inscriptions) are published from the monastery at Tel Masos, the pottery provides the only basis for dating. This review indicates a slightly different chronology than that proposed by Fritz, from the mid-to-late sixth century until the late seventh or early eighth century. The fact that no coins or other valuables were recovered in the excavations, while whole vessels were left lying *in situ*, suggests that the monastery was somewhat hastily abandoned by its occupants, but was not destroyed. Thus, the monastery at Tel Masos seems to have been established somewhat later than the one at Tel 'Ira, which flourished during the sixth to seventh centuries. Both monasteries were apparently abandoned around the late seventh or early eighth century, though occupation at Tel 'Ira continued on a more limited scale through the eighth century.

Har Beriah

Har Beriah is located about 300 m north of Tel 'Ira, on the opposite side of a small gully. Its peak is 7 m higher than the top of Tel 'Ira. The structure atop Har Beriah was first surveyed by Govrin and was later excavated under the auspices of the Tel 'Ira expedition. I begin by presenting Govrin's findings, followed by a review of the excavation report.

242. 91/1 (p. 92*)

Har Beriah. This is a square structure on a summit, completely surrounded by steep cliffs, 500 m northeast of Tel 'Ira (Site 240). It served as a mansion connected with the settlement at Tel 'Ira. Three phases were distinguished: (a) The structure measured 100 sq m, boasting an immense hall and limestone slab-paved room, leading to a courtyard. The structure contained a cistern. (b) A wing, containing a large hall and two rooms, was appended to the southern side. (c) A room was added onto the northern side. Cooking-pot fragments and polygonal jars, an oil-lamp decorated in geometric relief, and segments of basalt millstones, were found inside. On the terrace outside is a stone fence enclosing a tabun.

Pottery: Byzantine.

For references to the publications of the excavations, see p. 92*.

Unillustrated pottery:

- (1) Cooking pot; rim and handle fragment. Cooking Pots Form 4, dated 5c/6c to late 7c/early 8c.¹⁷⁶

171. Fritz, “Das nestorianische Kloster: Die Keramik,” pls. 167:1–2; 168:4–7; see Magness, *JCC*, 193–95; 236–40; FBW Bowls Forms 1A and 1B; FBW Jars, Jugs, and Juglets.

172. Fritz, “Das nestorianische Kloster: Die Keramik,” pl. 169:7; Magness, *JCC*, 251–2; Oil Lamps Form 3A.

173. Fritz, “Das nestorianische Kloster: Die Keramik,” pl. 169:1–2; for examples from Tel 'Ira with references, see n. 163 above.

174. *Ibid.*, pl. 169:8; Magness, *JCC*, 129. The apparent absence of early channel-nozzle oil lamps at Tel Masos is surprising in light of the date of the assemblage and the frequency of this type at Tel 'Ira. Could it be that these lamps are found mainly in 8c contexts at sites in the Negev?

175. Fritz, “Das nestorianische Kloster: Die Keramik,” pl. 169:10; for the example from Tel 'Ira and references, see n. 158 above; for an example from Har Beriah, see n. 181 below.

176. Magness, *JCC*, 219–20.

- (2) Bowl; body fragment. Late Roman "C" Ware.
- (3) Storejar; rim fragment. Buff ware.
- (4–7) Four cooking ware body fragments.
- (8–16) Nine storejar body fragments, at least one of which is a Gaza amphora.

Summary: All of this looks Byzantine (5c/6c–7c). This date is consistent with the following review of the pottery from the excavations at Har Beriah.

The Excavations at Har Beriah

The structure on Har Beriah was identified by the excavators as a Byzantine manor house of the sixth to seventh centuries. Different architectural phases were indicated by the successive addition of rooms to the original two-room house.¹⁷⁷ Though only a relatively small amount of pottery was recovered in the excavations, it indicates a mid–sixth through seventh-century range for the occupation of the manor house.¹⁷⁸ The types represented include a Fine Byzantine Ware bowl of mid–sixth to late-seventh-century date,¹⁷⁹ Gaza amphoras,¹⁸⁰ an imported amphora of the same type as the one with the red dipinto from Tel 'Ira,¹⁸¹ and a complete large candlestick lamp of mid–sixth to late-seventh-century date, found on the floor of the courtyard (L405).¹⁸² The occupation of the manor house appears to be largely contemporary with that of the monastery at Tel 'Ira, and both were probably abandoned at about the same time, in the late seventh or early eighth century.

Continuation of Sites in Govrin's Survey Map of Nahal Yattir

251. 00/3 (p. 94*)

Nahal Be'er-sheva'. This is a square pen on the northern bank of Nahal Be'er-sheva'.

Pottery: Early Arab.

Illustrated pottery (p. 153):

- (1) Shallow bowl/saucer; rim fragment; est dia 10. Smooth, very hard-fired grey ware; fired streaky grey and brown (5YR5/4) at surfaces; pare-burnished on exterior; a few tiny white grits. FBW Bowls Form 2B, dated mid–7c to 9c/10c.¹⁸³
- (2) Bowl; tiny rim fragment; est dia 7. Thin, smooth, hard-fired, orange-brown ware (5YR6/4); fired streaky orange-brown (5YR6/4) and grey at surfaces; burnished strips on exterior; no visible grits. FBW Bowls Form 1E, dated 8c–9c.¹⁸⁴
- (3) Bowl; large rim fragment; est dia 9. Thin, smooth, hard-fired ware; grey core; fired streaky orange-brown (5YR6/4) and grey at surfaces; burnished strips on exterior; a few tiny white grits. FBW Bowls Form 1E, dated 8c–9c.¹⁸⁵

177. For the excavation of the structure on Har Beriah, see B. Cresson, "Area F," in Beit-Arieh, *Tel 'Ira*, 97–102.

178. For the pottery, see M. Fischer and O. Tal, "Pottery from Har Bariyah (Area F)," in Beit-Arieh, *Tel 'Ira*, 346–49; fig. 6.152. The excavators suggested a mid–6c to mid–7c date for this assemblage.

179. *Ibid.*, 346; fig. 6.152:4; see Magness, *JCC*, 193–95; FBW Bowls Forms 1A and 1B; the ring base is the key indicator of the date of this fragment.

180. Fischer and Tal, "Pottery from Har Bariyah," fig. 6.152:16–19, 20–21.

181. *Ibid.*, fig. 6.152:20; see n. 158 above.

182. Cresson, "Area F," 99; Fischer and Tal, "Pottery from Har Bariyah," 347, fig. 6.151; fig. 6.152:10 (should read "En Yabrud" instead of "En Yarad"); see Magness, *JCC*, 251–52; Oil Lamps Form 3A.

183. Magness, *JCC*, 198–200.

184. *Ibid.*, 193–96.

185. *Ibid.*

- (4) Bowl; tiny rim fragment; est dia 12. Hard-fired, orange-red ware (2.5YR5/6); dark orange-red slip (10R4/6) and burnish over all; some tiny white grits. Late Roman "C" Ware Form 3, dated mainly second half of 5c to first half of 6c.¹⁸⁶
- (5) Bowl; rim fragment; est dia 19. Coarse, gritty, yellow-brown ware (10YR7/3); traces of pink-brown slip (5YR7/3) over all; ancient drilled repair hole; many tiny-small dark grits.
- (6) Casserole or lid; tiny rim fragment. Brittle, gritty, red-brown cooking ware (2.5YR4/4); fired purple-red (2.5YR4/3) on interior; many tiny dark and white grits.
- (7) Casserole lid; small rim fragment. Gritty, dark red-brown cooking ware (2.5YR4/4); many tiny white grits; many tiny glistening flecks of gold mica. Casserole Lids, dated late 3c/early 4c to 9c/10c.¹⁸⁷
- (8) Casserole; almost complete handle. Gritty, red-brown cooking ware (2.5YR4/6); dark red slip (10R4/4) on exterior; fired dark purple-grey (10R3/2) over most of handle; many tiny white grits. Casseroles Form 1, dated late 3c/early 4c to 8c/9c.¹⁸⁸

Unillustrated pottery:

- (1) Bowl; small rim fragment. Smooth, hard-fired, orange-brown ware (2.5YR5/6); grey core; a few tiny white grits. FBW Bowls Form 2C, dated mid-7c to 9c/10c.¹⁸⁹
- (2-3) Two bowls; flat base fragments. Smooth, very hard-fired ware; grey core; fired streaky grey and brown (5YR5/4) on interior; pare-burnished over exterior. One is fired brown on exterior; the other is grey with a brown streak on exterior. One has two lightly incised concentric grooves on bottom of base on exterior. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹⁹⁰
- (4) Casserole or lid; rim fragment; est dia 22. Gritty, dark red-brown cooking ware (2.5YR4/4); many tiny-small white grits.
- (5-6) Two bowls; body fragments. FBW, apparently early Islamic in date.
- (7-9) Three casseroles; handle fragments. One is thin—could be early to late Roman. The others are Byzantine-early Islamic.
- (10-11) Two storejars; tiny rim fragments. One is of gritty, orange-brown ware; the other is of gritty, dark red-brown ware (could be cooking ware).
- (12-13) Two storejars. One handle fragment and one body fragment.

Summary: Most of the diagnostic pieces here are early Islamic (8c-9c), but there is also some Byzantine material (5c/6c-7c). The unillustrated casserole handle (no. 7) could be Roman.

252. 00/4 (p. 95*)

Nahal Be'er-sheva'. This is a rectangular farmstead on a hilltop, overlooking Nahal Be'er-sheva' from the southeast. In the northern section of the structure is a courtyard. There is a row of rooms along the southern section, and a longroom in the eastern section. An entranceway is located in the center of the eastern wall. To the west is a Bedouin cemetery.

Pottery: Byzantine.

Illustrated pottery (p. 153):

- (1) Bowl; tiny rim fragment; est dia 7. Smooth, thin, hard-fired orange ware (2.5YR5/6); light orange slip (5YR6/6) on exterior; no visible grits. The ware is characteristic of FBW Bowls Form 1A or 1B, dated mid-6c to late 7c/early 8,¹⁹¹ but the profile resembles FBW Bowls Form 1E, dated 8c-9c.¹⁹²

186. Hayes, *LRP*, 329-38.

187. Magness, *JCC*, 215.

188. *Ibid.*, 211-12.

189. *Ibid.*, 198-200.

190. *Ibid.*, 193-96.

191. *Ibid.*

192. *Ibid.*

- (2) Bowl; small rim fragment; est dia 10. Smooth, hard-fired ware; thick grey core, fired streaky orange-brown (5YR6/4) at surfaces; a few tiny white grits. FBW Bowls Form 1E, dated 8c–9c.¹⁹³
- (3) Bowl; small rim fragment; est dia 12. Thin, smooth, hard-fired ware; grey core; orange-brown ware (5YR6/4) with grey streaks; no visible grits. FBW Bowls Form 1E, dated 8c–9c.¹⁹⁴
- (4) Cooking pot; tiny rim fragment; est dia 12. Gritty, red-brown cooking ware (10R4/6); purple-red slip (10R4/3) over exterior; many tiny white grits. Cooking Pots Form 4C, dated 5c/6c to late 7c/early 8c.¹⁹⁵
- (5) Casserole; large rim fragment; est dia 12. Gritty, red-brown cooking ware (10R5/6); dark purple slip (10R4/2) over all; many tiny white grits. Casseroles Form 3, dated late 7c/early 8c to 9c/10c.¹⁹⁶
- (6) Bowl; rim and wall fragment; est dia 16. Coarse ware; thick grey core, fired red-brown (2.5YR5/4) at surfaces; some tiny-small white and dark grits.

Unillustrated pottery:

- (1) Bowl; flat base fragment. Very hard-fired ware; thick grey core, fired orange-brown on interior and brown on exterior; two incised concentric circle in center of exterior of base. FBW Bowls Form 1D, dated late 7c/early 8c to 9c/10c.¹⁹⁷
- (2–5) Four FBW Bowl body fragments, all of which look 8c–9c.
- (6) Casserole handle.
- (7) Storejar; rim fragment. Southern Palestinian bag-shaped rim profile, but Gaza amphora ware.¹⁹⁸
- (8) Storejar; tiny rim fragment. Gritty orange-brown ware.
- (9) Complete jar or storejar handle with part of body. Very coarse, uneven brown ware.
- (10) Jar or storejar handle fragment.
- (11) Jar; flat base fragment. Porous, light yellow ware (2.5YR8/3); some tiny-small dark grits.
- (12) Jar or jug; flat base fragment. Orange-brown ware (5YR5/6); some tiny-small dark grits.
- (13) Ribbed cooking ware body fragment.

Summary: Most of the pottery here is 8c–9c, and the rest could be of the same date. However, some of the pieces (such as unillustrated jar no. 7) could also be Byzantine.

254. 10/2 (p. 95*)

Nahal Be'er-sheva^c. This is a small settlement on the banks of a tributary of Nahal Be'er-sheva^c, poorly preserved due to intensive agricultural work. There is a scattering of pottery and many building stones on the surface.

Pottery: Byzantine.

Illustrated pottery (p. 154):

- (1) Cup/bowl; small rim fragment; est dia 10. Thin, smooth, hard-fired ware; thick grey core, fired streaky orange-brown (5YR6/6) and grey at surfaces; fired grey-brown on exterior of rim due to stacking when firing; some tiny-small white grits.
- (2) Bowl; small rim fragment; est dia 19. Smooth, hard-fired, red-brown ware (2.5YR5/4); grey core; brown slip (7.5YR6/4) on exterior; many tiny-medium white and dark grits.

193. Ibid.

194. Ibid.

195. Ibid., 219–21.

196. Ibid., 214.

197. Ibid., 193–96.

198. See J. Magness, "The Pottery from Area V/4 at Caesarea," in W. G. Dever (ed.), *Preliminary Excavation Reports: Sardis, Bir Umm Fawakhir, Tell el-'Umeiri, the Combined Caesarea Expeditions, and Tell Dothan* (AASOR 52; Atlanta: Scholars Press, 1995) 135.

- (3) Basin; rim fragment; est dia 34. Hard-fired, red-brown ware (2.5YR5/6); grey core; some tiny-medium white and dark grits.
- (4) Storejar; rim and neck fragment; est dia 7. Smooth, hard-fired, yellow-brown ware (7.5YR6/4); some tiny-small dark grits.
- (5) Storejar; rim and neck fragment; est dia 8. Smooth, dark orange-brown ware (2.5YR6/6); some tiny-small white and dark grits.
- (6) Storejar; small rim fragment; est dia 7. Smooth, hard-fired, orange-brown ware (5YR6/6); streaky brown slip (7.5YR5/3); a few tiny white and dark grits.
- (7) Storejar; rim and neck fragment; est dia 9. Coarse, gritty, dark red ware (2.5YR4/4); many tiny-large white grits.
- (8) Storejar; rim and neck fragment with top of shoulder; est dia 9. Hard-fired ware; thick grey-brown core; orange-brown ware (5YR6/6); yellow-brown slip (10YR7/3) over all; many tiny-medium dark grits.

Summary: The bowls and basin (nos. 1–3) do not have classic Byzantine profiles. Since the storage jars (nos. 4–8) are definitely early Roman, all of this material probably dates to the 1c.¹⁹⁹

260. 40/3 (p. 97*)

Nahal 'Anim. This is a dwelling cave at the southern end of a spur. The roof is partly stone-built and vaulted, and partly of natural rock. A wall divides the cave along its width.

Pottery: Roman-Byzantine.

Pottery not found.

261. 40/1 (p. 97*)

Nahal 'Anim. These are structures on a narrow spur. The main structure is rectangular (a farmstead?). An entranceway in the eastern section leads to a large courtyard. Four rooms lie in the western section. To the west are the remains of a structure, with another one to the south. A filled-in cave surrounded by a courtyard lies in the center. South of the courtyard is a longroom.

In the nearby wadi are the remains of dams and agricultural terraces.

Pottery: Early Bronze, Byzantine.

Unillustrated pottery:

- (1) Storejar; body fragment. Thick, orange-brown ware.
- (2) Cooking ware; body fragment. Thick, dark red-brown cooking ware; ribbed.

Summary: Probably Byzantine (5c/6c–7c).

271. 60/3 (p. 100*)

Harei 'Ira. This is a watch-booth on a mound near a wadi. To the east is a concentration of pottery. A dam is constructed across the wadi.

Pottery: Iron Age, Roman-Byzantine.

Pottery not found.

199. See, for example, R. Bar-Nathan, "Pottery and Stone Vessels of the Herodian Period (1st century B.C.–1st century A.D.)," in E. Netzer, *Greater Herodium* (Qedem 13; Jerusalem: Hebrew University, 1981) 115, pl. 3.

272. 70/2 (p. 100*)

Nahal Be'er-sheva^c. This is a fort on a mound, on the eastern bank of a tributary of Nahal Be'er-sheva^c. Two square rooms adjoin the inner, northern corners. There are remains of walls outside the eastern section. Nearby, a dam is built across the wadi, visible in the cross-section on both banks (possibly two parallel dams). On the western bank, near the confluence of the wadis, is a bell-shaped cistern.

Pottery: Roman-Byzantine.

Pottery not found.

274. 70/3 (p. 101*)

Nahal Be'er-sheva^c. A rectangular structure consisting of two units on a wadi bank.

Pottery: Byzantine.

Pottery not found.

Clusterings of Sites

In this section, I have grouped the sites surveyed by Govrin into fourteen "clusters," based on the topography of the region and on the available chronological evidence. This synthesis represents an impressionistic rather than an exact reconstruction of the ancient landscape of the Yattir region.

(I) A concentration of Byzantine sites clustered around Tel Yeshua^c (125) and H. So'a (150)

Tel Yeshua^c (125) is a site with a monastery located atop a hill in the Harei 'Anim range (plan of site on p. 89). H. So'a (150) is on the summit of a steep hill immediately to the south of Tel Yeshua^c. A church sits on the southern side of the hilltop (plan of site on p. 98). The pottery from both sites is Byzantine. The following sites are located in their immediate vicinity and are apparently connected with them:

124: a rock-hewn cistern on the saddle between Tel Yeshua^c and H. So'a; two more cisterns are located nearby.

154: a rock-hewn cistern on the southern slope of Tel Yeshua^c.

149: a rock-hewn cistern in a tributary of Nahal Yeshua^c.

147: a rock-hewn cistern near a tributary of Nahal Yeshua^c. Nearby is a limestone column drum, apparently from H. So'a.

At the eastern foot of Tel Yeshua^c:

158: Nahal 'Anim, a settlement at the confluence of wadis, comprising four units, dams, terraces, agricultural remains, and conduits (plan of site on p. 103). Pottery: Byzantine (not found).

156: two parallel walls.

At the southern foot of H. So'a:

148: Harei 'Anim, a terraced farmstead on a steep slope south of H. So'a, with a pen, two cisterns, and a trough. The only diagnostic piece of pottery is Byzantine; others look like they could be Roman.

151: Nahal 'Anim, a structure on the northern bank of a tributary of Nahal 'Anim, with a cistern nearby. The pottery is Byzantine.

146: retaining walls on an east-west axis on both sides of a saddle south of H. So'a.

145: a cistern in the southern slope of spur, surrounded by an oval fence.

- 153: Harei 'Anim, an enclosure on the summit of a spur descending eastward from H. So'a, with two cisterns. Other structures are located nearby. Pottery: Roman-Byzantine (not found).
- 155: walls on the northern bank of a tributary of Nahal 'Anim.
- 157: a wall on the western slope of a spur west of Nahal 'Anim. The pottery is not diagnostic but looks Byzantine.

Across the wadi from these remains (on the eastern bank of Nahal 'Anim) are more agricultural installations (159), including a square watch-booth, retaining wall, terrace, and dam. These could be connected with 151, 153, 155, 157, or they might constitute part of a separate complex.

(II) A cluster of Byzantine and/or early Islamic agricultural sites to the west of Tel Yeshua'

- 122: Nahal Yeshua, a rectangular structure on the northwestern slope of a hill, with remains of walls on several levels. To the south, along the slope, are several rock-hewn cisterns, with remains of structures nearby. All of the diagnostic pottery is early Islamic, although some of the non-diagnostic pieces could be Byzantine
- 123: a rectangular structure on the hillside. The pottery is early-late Roman, Byzantine, and early Islamic
- 121: a rock-hewn cistern near Nahal Yeshua'
- 120: a rock-hewn cistern on the southern slope of a moderate spur.
- 119: a structure on a hilltop, 100 m south of Nahal Yeshua'. The pottery is not diagnostic, but looks Byzantine.
- 118: a rock-hewn cistern in a tributary of Nahal Yeshua'.
- 117: a watch-booth on a hilltop, commanding the surrounding agricultural plots. Some 20 m to the west is an agricultural terrace. The pottery is not diagnostic.
- 144: a rock-hewn cistern near a tributary of Nahal Yeshua'.
- 116: two rock-hewn cisterns some 30 m apart, near a tributary of Nahal Yeshua'.

(III) A cluster of Byzantine sites around Giv'at Mahat (35)

Giv'at Mahat (35) is a square structure (5 × 5 m) on the summit of Giv'at Mahat. There is a scattering of flint implements on top of the hill, but the structure appears to be later in date. The following remains are located on the western and southern slopes of this hill:

- 34: a structure on the western spur of Giv'at Mahat. The pottery is Roman and/or Byzantine.
- 33: Giv'at Mahat, ca. 10 structures spread along 100 m on the western bank of a wadi draining southward from Giv'at Mahat. Along the wadi, mainly on its western bank, are the remains of long retaining walls. Pottery: Byzantine (not found).
- 32: Giv'at Mahat, a farmstead with a large courtyard in its center on a spur descending southward from Giv'at Mahat. The pottery is Byzantine and/or early Islamic.
- 30: Giv'at Mahat, a square fort on a spur descending southward from Giv'at Mahat. The pottery is not diagnostic, but looks Byzantine.
- 29: three rock-hewn cisterns, with a trough carved into a limestone column drum nearby. The pottery is Byzantine.
- 59: two rock-hewn cisterns with a crushing stone nearby.
- 23: a cistern dug into the loess plain, 300 m south of the 'Arad road. Pottery: Byzantine (not found).
- 54: a cistern dug into the loess, 300 m south of the the 'Arad road. The pottery is Byzantine.
- 56: four cisterns hewn into the eastern slope of a spur 200 m south of the 'Arad road. A crushing stone lies nearby.

- 57: a square watch-booth on a mound in the center of an agricultural plot. The pottery is not diagnostic, but looks early Islamic or later.
- 58: a cistern hewn into the southern bank of Nahal Shoqet, with two hewn caves some 50 m to the west.
- To the north of Giv'at Mahat, there is a square watch-booth (6) and a rock-hewn cistern (37).

(IV) A cluster of Byzantine and early Islamic sites around H. Hur (63) (Byzantine to the south; early Islamic to the north)

H. Hur (63) is a large site on the southern slopes of the Harei Yattir range, covering two elongated hills (ca. 200 dunams) that overlook the Be'er-sheva' Basin from the north. Ruins are scattered on the summits and slopes, descending southward toward the Tel Shoqet–Arad junction. In the northeast of the site are the remains of a large church. An ancient road traverses the saddle between the hills of H. Hur. The settlement, descending southward, includes square structures with lanes, rock-hewn granaries, and agricultural installations in between. There are also scores of bell-shaped, rock-hewn cisterns, and a section of a massive wall that may be part of the fortification wall (plan of the church and monastery on p. 58; note the possible later mihrab added to the south wall of one of the rooms). Most of the pottery is Byzantine, but there also appears to be a little 8c–9c pottery. The following sites are located in the immediate vicinity and are apparently connected with it:

A group of Byzantine sites south of H. Hur:

- 60: H. Hur, structures extending in a row from north to south for some 100 m on a moderate spur south of H. Hur. The only diagnostic piece of pottery is early Roman; the nondiagnostic pieces could either be early Roman or Byzantine.
- 61: H. Hur, a basilical church on a plateau 100 m south of Shoqet Junction–Arad road (plan of church on p. 55). Pottery: Byzantine (not found).

A group of Byzantine sites southeast of H. Hur:

- 100: Nahal Hur, a farmstead on the western bank of Nahal Hur, with two cisterns (plan of site on p. 79; note the possible mihrab). Pottery: Byzantine (not found).
- 99: a large scattering of pottery on a hill. Most of the pottery is Byzantine, with a little early Roman material.
- 101: an oval enclosure on the eastern slope of a spur descending from a hilltop. In its center are the remains of a structure built of very large flint stones. On p. 80: a photograph of a possible stela built into the wall of the enclosure. Pottery: Byzantine (not found).
- 130: a rectangular structure (watch-booth?) on the western bank of Nahal Hur.

From northeast to north of H. Hur, there are clusters of remains that are apparently early Islamic; some could also be Byzantine:

- 102: Nahal Hur, a building constructed on three levels on the eastern slope of a spur, overlooking Nahal Hur. The diagnostic pottery is early Islamic, but some of the nondiagnostic pieces could be Byzantine.
- 70: a rock-hewn cistern 30 m west of Nahal Hur.
- 71: an arched wall built parallel to Nahal Hur, buttressing an agricultural terrace.
- 69: a rock-hewn cistern in a slope, near the confluence of wadis north of Nahal Hur.
- 67: a square watch-booth near the wadi, commanding an extensive agricultural area.
- 64: two structures on the slopes of a spur north of H. Hur. The pottery is all 8c–9c, except for a couple of 4c–5c pieces.

66: a rock-hewn cistern on a slope.

65: a rock-hewn cistern near the wadi.

62: a rock-hewn cistern with a trough; a hewn storeroom is located nearby.

Sites 64–66 also lie at the western foot of Tuwaiyil el Mahdhi (68), a square fortress on a summit commanding the surrounding area (plan of site on p. 62). The pottery is all early Islamic or later. Thus, this group of sites appears to be early Islamic. Tuwaiyil el Mahdhi overlooks an ancient road.

(V) Two groups of agricultural sites in Nahal Yattir, between Tel Yeshua^c and H. So^a on the east, and Giv^cat Mahat on the west. One group clusters around Byzantine farmstead 80; another clusters around early Islamic farmstead 78.

80: Nahal Yattir, a rectangular farmstead near a wadi junction, some 250 m east of Nahal Yattir. In its center lies a courtyard flanked by rectangular rooms. Some 20 m west, on the southern bank of a tributary of Nahal Yattir is a dam, with another about 40 m further west. The pottery is Byzantine.

79: a structure on a small mound in the center of an agricultural plot, with a small dam to the south, near a tributary of Nahal Yattir.

81: a massive retaining wall on the southern bank of Nahal Yattir (photo on p. 69).

82: a rock-hewn cistern adjacent to Nahal Yattir.

83: a massive dam running the breadth of Nahal Yattir and its eastern bank. The southern façade, constructed across the current, is supported by pillars.

84: a rock-hewn cistern near the confluence of tributaries of Nahal Yattir.

85: a rock-hewn cave at the edge of a spur; originally a cistern.

86: a cistern in the northern bank of the wadi.

88: a square watch-booth at the edge of a spur.

(Some of the above remains could be associated with the large adjacent Roman site of Nahal Yattir [87].)

78: Nahal Yattir, a rectangular farmstead on a moderate slope descending to Nahal Yattir from the east (plan of site on p. 68). Except for one early Roman fragment, the pottery is early Islamic.

76: a rectangular structure in the center of an agricultural plot east of Nahal Yattir. Another structure with a rectangular courtyard lies some 100 m to the northeast.

77: a retaining wall along the eastern bank of Nahal Yattir, with a rock-hewn cistern some 100 m to the south. Remains of walls lie nearby.

113: a massive dam across Nahal Yattir, and another about 50 m to the south. A retaining wall sits on the wadi slope about 40 m to the east.

(VI) A group of agricultural sites in Nahal Yattir, east of H. Hur and south of cluster V. Most seem to be contemporary with, and therefore connected with, Byzantine Farmhouse 103. Some might be connected with early Islamic Farmhouse 136, which is located to the southwest of this group.

103: Nahal Hur, a square farmstead on a spur. Remains include limestone column drums and a decorated limestone lintel (plan of site on p. 81). Pottery: Byzantine (not found).

104: Nahal Yattir, a fort on a hilltop. Pottery: Roman, Byzantine (not found).

105: a rectangular structure on the eastern slope of a spur running parallel to Nahal Yattir. The pottery is not diagnostic but looks Byzantine.

- 106: remains of a structure near a tributary of Nahal Yattir.
- 107: a watch-booth in an agricultural plot, 200 m east of Nahal Yattir.
- 108: a dam built across the wadi, 300 m west of the confluence of Nahal Yattir with Nahal Yeshua^ʿ.

To the north and east of this cluster, and perhaps connected with it:

- 109: three watch-booths ca. 60 m apart, in a large agricultural plot, near a tributary of Nahal Yattir. To the east of the wadi is a retaining wall. The pottery is Byzantine.
- 110: three dams near the confluence of Nahal Yeshua^ʿ and Nahal Yattir, and a watch-booth on the slope overlooking the confluence.
- 111: a watch-booth on the western bank of Nahal Yattir, near its confluence with Nahal Yeshua^ʿ.
- 114: a structure at the edge of a spur, overlooking the confluence of Nahal Yeshua^ʿ with Nahal Yattir. The pottery is Byzantine.
- 112: a rock-hewn cistern near the confluence of Nahal Yeshua^ʿ with Nahal Yattir. A rectangular structure lies some 20 m to the south.

Some of the above sites could be connected with:

- 136: Nahal Yattir, a square farmstead on the bank of a tributary of Nahal Yattir (plan of the site on p. 92). All of the diagnostic pottery is early Islamic, though some of the nondiagnostic pieces could be Byzantine.

(VII) A group of Byzantine and/or early Islamic agricultural sites in Nahal ʿAnim and Nahal Segor, just south of the ʿArad road

- 184: Nahal ʿAnim, a farmstead in a small wadi, 80 m south of the ʿArad road, including a cistern. A stone fence surrounds the farmstead and continues on the far side of the wadi (plan of the site on p. 119). The most diagnostic pottery is early Islamic, though some of the other pieces, especially the cooking pots and casseroles, could be Byzantine.
- 188: a rectangular structure on the lower slope of a spur descending from Harei ʿIra to Nahal ʿAnim. Some 20 m to the southeast—two rock-hewn cisterns. The pottery is early Islamic.
- 182: a rock-hewn cistern near a tributary of Nahal ʿAnim.
- 185: Nahal ʿAnim, structures and natural caves—dwellings, on the eastern slope of a spur, 200 m south of the ʿArad road. Caves are closely clustered on several levels. There is a rectangular courtyard in the center of the complex. A boundary fence descends to the wadi, some 30 m to the north. The pottery is Byzantine and early Islamic.
- 186: a rectangular structure (watch-booth?) on a mound, 200 m south of ʿArad road. Remains of agricultural terraces in the area. The pottery is Byzantine.
- 187: Nahal ʿAnim, structures on a spur, 300 m east of Nahal ʿAnim, including a rectangular structure (watch-booth?), a rectangular storeroom, another structure, several walls, and a circular structure. Pottery: Byzantine (not found).
- 183: a rock-hewn cistern on the western bank of Nahal ʿAnim, 300 m south of hilltop. Some 10 m west of the cistern are the remains of a structure. The pottery is early Roman, and some could be Byzantine.

Farther to the south, there is an early Islamic agricultural complex in Nahal Segor:

- 201: Nahal Segor, structures (a farmstead?) on a moderate slope, 500 m east of confluence of Nahal ʿAnim and Nahal Segor. The pottery is not particularly diagnostic but appears to be early Islamic.
- 202: two rock-hewn cisterns set 50 m apart on the northern bank of Nahal Segor.

(VIII) A group of Byzantine sites in the vicinity of Tel 'Ira (240), some of which continued to be occupied or used during the early Islamic period

Tel 'Ira (240) overlooks the Be'er-sheva' Basin. There is a Byzantine monastery dedicated to St. Peter. The ecclesiastical establishment flourished during the sixth to seventh centuries. It was apparently abandoned in the late seventh or early eighth century, though domestic occupation continued at the site through the eighth century.

- 242: Har Beriah, a square structure on the summit, completely surrounded by steep cliffs, 500 m northeast of Tel 'Ira (240). It is a manor house that was occupied from the mid-sixth to seventh century, and was abandoned at about the same time as the monastery at Tel 'Ira.
- 243: a square, rock-hewn cave near a wadi, on the eastern slope. Retaining walls along the western bank of the wadi.
- 244: a square watch-booth near a wadi, with a cistern ca. 50 m to the north.
- 245: a rock-hewn cistern in a wadi 300 m southeast of the hill. A hewn cave ca. 100 m to the south, on the eastern bank.
- 246: a square structure on a saddle, with a small courtyard bounded by a fence to the north. Remains of walls to the west, and a retaining wall some 10 m to the east.

Farther to the south and east:

- 247: a square structure on a narrow spur, with retaining walls to the south.
- 276: two cisterns, set 50 m apart, hewn in the wadi.

To the west of Tel 'Ira, on the lower slopes:

- 239: Harei 'Ira, a rectangular farmstead on the western bank of a tributary of Nahal Be'er-sheva'. Except for a Turkish pipe fragment, all of the pottery looks Byzantine (the pieces are not diagnostic).
- 238: three rock-hewn granaries in the wadi.

(IX) A string of early Islamic sites centering around settlements/farmsteads 198, 216, and 211; these lie in Nahal 'Anim, southwest of early Islamic sites 188 and 201 in Nahal Segor (see cluster VII above). Some of the sites (see 198 and 211) could be Byzantine as well.

From northeast to southwest:

- 198: Be'er Tarshan, structures, cisterns, wells, and granaries, along 300 m on both banks of Nahal 'Anim. A farmstead lies on the slope descending to Nahal 'Anim. Some 25 m south of the farmstead is a rectangular structure. To its south, on the edge of a cliff overlooking Nahal 'Anim, is another rectangular structure. A rectangular fort is located on a low hill south of the wadi. There is a rock-hewn well on the western bank of Nahal 'Anim, and two more wells some 20 m to the south, on the eastern bank of the wadi. On the western bank, opposite the wells, is a rock-hewn cistern, with another cistern some 30 m to the east, on the northern bank. Thirty meters away, on the western cliff above the wadi is a rectangular, rock-hewn granary (plan of site on p. 126). All of the diagnostic pottery is early Islamic; some of the nondiagnostic pieces could be Byzantine or medieval.
- 197: a rectangular cistern and granaries hewn in the bank of a tributary of Nahal 'Anim. Pottery: Roman-Byzantine (not found).
- 196: a circular structure 200 m southeast of Nahal 'Anim. In its center, an ashlar-built installation (agricultural?); stones decorated with incised geometric designs.

- 195: a watch-booth on a moderate slope descending from the north to Nahal 'Anim.
- 216: Nahal 'Anim, a farmstead comprising two units, on a narrow spur north of the confluence of Nahal 'Anim with Nahal Beriah. A rock-hewn cistern near the confluence of the wadis. To the east of Nahal Beriah are the remains of structures (plan of the site on p. 136; note the presence of an apparent mihrab in the south wall of the room at the southeastern end of the settlement). The pottery is early Islamic, and some could be even later.
- 214: a rock-cut cistern near a tributary of Nahal 'Anim.
- 213: a natural cave on the northern bank of Nahal 'Anim, with a dam constructed across the wadi some 30 m to the south. On the eastern bank of the wadi is a retaining wall.
- 215: a structure on the southern bank of Nahal 'Anim, 200 m to the south of the summit.
- 212: a rock-hewn cistern near a tributary of Nahal 'Anim.
- 211: Nahal 'Anim, remains of a settlement, razed to its foundations, on a moderate slope descending from the north to Nahal 'Anim. Stone heaps indicate that the settlement comprised between 12 and 15 structures. Remains include limestone column drums. All of the diagnostic pottery is early Islamic and some could be even later; some of the nondiagnostic pieces could be Byzantine.

Farther to the southwest:

- 210: Nahal 'Anim, a fort on a hilltop, dominating its surroundings. The pottery is not particularly diagnostic, but looks Byzantine.
- 229: a structure on a narrow spur.

(X) Two groups of agricultural sites to the south of cluster IX, on the lower slopes of the Harei 'Ira range, along the eastern bank of Nahal 'Anim. One group clusters around undated site 231; the other clusters around site 261, which is probably Byzantine.

- 231: Harei 'Ira is an agricultural complex—terraces, structures, caves, and retaining walls—in a narrow wadi, 400 m west of a hilltop. On both banks of the wadi are well-preserved retaining walls enclosing cultivated areas. Undated, no pottery.

To the north and east of site 231:

- 233: a rock-hewn cistern in a wadi draining southwest from the hilltop.
- 234: a rock-hewn cistern in a tributary of Nahal 'Anim.
- 236: a two-roomed structure in a wadi.
- 237: rock-hewn granaries on a cliff, set 10 m apart. To their north and south—two large, rock-hewn cisterns.
- 261: Nahal 'Anim, structures on a narrow spur. The main structure is rectangular (a farmstead?). There are other structures to the west and south, including a filled-in cave surrounded by a courtyard. In the nearby wadi are dams and agricultural terraces. The pottery is not diagnostic, but looks Byzantine.
- 262: a structure on the northwestern slope of the hill, near a tributary of Nahal 'Anim.
- 263: a rock-hewn granary in the wadi bank. To the north are two rock-hewn cisterns.
- 267: a rock-hewn cistern near the wadi, 200 m southeast of the hill, with an oval pen some 100 m to the south.

A few more small agricultural sites of uncertain date lie farther to the east:

- 269: a square, rock-hewn granary 200 m southeast of the hilltop.

- 270: two rock-hewn granaries set 20 m apart, in the eastern slope of the hill, with a rock-hewn cistern nearby, to the east of the wadi.
- 271: a watch-booth on a mound near the wadi: Pottery: Roman-Byzantine (not found).
- 272: Nahal Be'er-sheva^c, a fort on a mound on the eastern bank of Nahal Be'er-sheva^c. A dam is built across the wadi nearby. A bell-shaped cistern on the western bank, near the confluence of wadis. Pottery: Roman-Byzantine (not found).
- 274: a rectangular structure, comprising two units, on the wadi bank. Pottery: Byzantine (not found).
- 275: a watch-booth on the wadi bank.

(XI) A group of agricultural sites in Nahal Molada, centering around two farmsteads (169, 170), one of which (169) is early Islamic; the other is Byzantine or early Islamic.

- 169: Nahal Molada, a farmstead on a moderate slope, 400 m north of Nahal Molada. A square structure is located some 10 m to the southwest. The pottery is early Islamic.
- 170: Nahal Molada, a farmstead on a moderate slope 300 m north of Nahal Molada, including a hewn cistern. A square structure lies some 25 m east of the farmstead. To the east are several adjoining rooms and a courtyard. Nearby are several architectural elements (plan of site on p. 112). The pottery is not diagnostic, but looks Byzantine.
- 171: a square fort at the edge of a spur, some 400 m north of Nahal Molada, with a cistern ca. 20 m to the southwest (Note: this fort could be connected with the forts at sites 172 and 174, both of which are apparently Roman; site 175 is also a fort.)

A group of small agricultural sites northeast of 169 and 170:

- 173: a rock-hewn granary on the bank of a tributary.
- 176: a rock-hewn cistern in a wadi.
- 177: a structure on the western end of a hill, 250 m south of the 'Arad road.
- 178: a cistern near a tributary of Nahal Molada.

(XII) A group of agricultural sites in Nahal So'a and Nahal Yattir, centering around Byzantine farmstead 167, and possibly Byzantine site 166.

- 167: Nahal So'a, an L-shaped farmstead on a spur, with a partly-hewn cistern some 30 m to the east. The pottery is Byzantine.
- 166: Nahal So'a, structures situated along a moderate spur, with agricultural terraces in the wadi south of the spur (plan of the site on p. 109). The pottery could be Byzantine, but some pieces could be Roman.

Just to the north and west of these two sites lies a group of small agricultural sites in Nahal Yattir:

- 135: a watch-booth on a spur overlooking a large area along the eastern bank of Nahal Yattir.
- 134: two cisterns, 10 m apart, on the eastern bank of Nahal Yattir.
- 133: a watch-booth 100 m west of Nahal Yattir.
- 132: a massive dam across Nahal Yattir, with a watch-booth some 100 m to the west, on the slope.
- 131: a rectangular structure (watch-booth?) 20 m west of Nahal Yattir.
- 165: a retaining wall on the eastern bank of Nahal Yattir, with a dam constructed across the wadi some 20 m to the north.
- 164: a square structure (watch-booth?) on a hill 50 m south of Nahal Yattir. The pottery is early Roman.

(XIII) A group of sites centering around H. Yittan (162), a tel between Nahal Yattir and Nahal Molada, overlooking an ancient crossroads.

To the north, a cliff-like slope plunges down 20-m. The summit is occupied by a “Roman-Byzantine” farmstead (plan on p. 105). In the northwest of the tel are two rectangular structures, each containing rooms around a courtyard. Ca. 20 m to the south are two rock-hewn cisterns. More cisterns lie on the lower, southern slopes of the tel, near Nahal Molada. The diagnostic pottery is mostly early Islamic; there is also some Byzantine and Mamluke pottery.

To the north of H. Yittan:

- 163: a rectangular structure, described by Govrin as “apparently early Arab,” on the northern bank of Nahal Yattir (no pottery published). Two cisterns on the southern bank, 30 m apart.
- 161: a rock-hewn cistern near a tributary of Nahal Yattir.
- 128: a rectangular structure near a tributary of Nahal Yattir.

To the south and west of H. Yittan, a group of small Byzantine and/or early Islamic agricultural sites:

- 160: a rectangular cistern dug into the loess on the western bank of Nahal Yattir. The vaulted roof includes a decorated Byzantine capital apparently taken from H. Yittan.
- 194: a rectangular structure on a spur descending from H. Yittan to the southwest. Pottery: Byzantine (not found).
- 193: remains of two structures on the southern slope of a spur descending to the southwest from H. Yittan. Pottery: Byzantine (not found).
- 192: a rectangular structure on the edge of a narrow spur near Nahal Molada. Near Nahal Molada is another rectangular structure. The pottery is Byzantine and early Islamic.
- 191: a dam across Nahal Yattir, adjoined by a retaining wall at its southern end.
- 190: a watch-booth on the western bank of Nahal Yattir, 200 m west of the confluence of Nahal Yattir and Nahal Molada. Remains of walls nearby.
- 189: a square structure (pen?) on a moderate slope west of Nahal Yattir. Pottery: Byzantine (not found).
- 209: ruins of a structure in an agricultural plot. Among the ruins is a limestone column drum with an oblong depression in its center. A cistern is located nearby.

Another group of sites is located farther to the southwest in Nahal Yattir:

- 207: a square fort on a hilltop overlooking Nahal Yattir, commanding the road along the wadi bank. Some 30 m east of the fort, near an unpaved road, are structures and courtyards. Another rectangular structure lies some 25 m southeast of the structures. The pottery is Byzantine.
- 206: a rock-hewn cistern near a tributary of Nahal Yattir, some 50 m north of site 205. Two more cisterns lie to the north.
- 205: Nahal Yattir, an extensive settlement on the northwestern bank of Nahal Yattir, with two main phases of occupation: Iron Age I and Persian period. There is a little early Islamic pottery among the unillustrated material, and perhaps some later pottery.
- 204: a dam across Nahal Yattir, with remains of walls on a nearby terrace. Pottery: Byzantine (not found).

(XIV) A group of sites in Nahal Shoqet, west of H. Hur (63). The reuse of architectural fragments from H. Hur points to an early Islamic or later date for at least some of the remains.

- 51: Nahal Shoqet, a rectangular structure consisting of several rooms, near a tributary of Nahal Shoqet, with a built pen. Many building stones and column drums, scattered within and around the structure, were apparently taken from H. Hur.

- 52: Nahal Shoqet, a rectangular structure atop a moderate spur, probably of relatively recent date. Entranceway of hewn limestone blocks. Decoration is carved in relief on the lintel—a single limestone block.
- 53: Nahal Shoqet, a rectangular structure on an unpaved road leading from Giv'at Mahat to Tel Sheva'. The entrance is of hewn stones; above is a limestone lintel with carved decoration. In the northern wing, on the roof, is a section of a limestone chancel post, probably from a church.

Farther to the southwest:

- 96: a cistern on a low hill, near an unpaved road leading from H. Hur to Tel Shoqet.

Conclusion

Govrin identified over 90 of the sites he surveyed as Byzantine and only 13 as early Islamic. These included large settlements, forts and fortresses, farmsteads, isolated or small groups of structures, watch-booths, pens, agricultural terraces and dams, and cisterns. The pottery from 28 of the sites Govrin identified as Byzantine was either not diagnostic or could not be located by me. The pottery I examined from the rest of the sites contradicts Govrin's conclusion that "Byzantine settlement did not meet a violent end, but rather came to a close in a slow, gradual process of desertion and destruction."²⁰⁰ The following chart summarizes the results of my analysis, with Byzantine (Byz) referring to the fifth/sixth to seventh centuries, and early Islamic (EI) referring to the eighth to ninth centuries (the numbers are those assigned to the sites by Govrin):

Yattir Survey Sites: Numbers of Sites according to Type and Period

Byzantine:

Large sites: 3; 125 (a monastery); 150 (a church)
Farmsteads: 80; 148; 167; 242 (manor house on Har Beriah)
Structures: 44 (+ cistern); 72 (2 pens); 105; 114; 151 (+ cistern); 157
Watch-booths: 74, 109 (× 3); 186 (+ agricultural terraces)
Forts: 207; 210
Cisterns: 29 (× 3); 54
Large scattering of pottery: 99
Basilical church (pottery not found): 61

Probably Byzantine:

Farmsteads: 170; 239
Structures: 79 (+ dam), 119 (× 2); 166 (farmstead? + agricultural terraces); 229; 261 (+ dams)
Watch-booths: 73 (+ dam); 75 (+ dam)
Forts: 30, 139
Cisterns: 23, 183

Early Islamic:

Large sites: 68 (fortress); 198; 211
Farmsteads: 78; 136; 169; 184; 216 (with a probable mosque)
Structures: 64 (× 2); 122 (+ cisterns); 188 (+ 2 cisterns)
Watch-booths: 57

200. Govrin, *Map of Nahal Yattir*, 20*.

Indeterminate: 205 (earlier fortress, settlement)

Probably Early Islamic:

Structures: 201 (farmstead?)

Byzantine and Early Islamic:

Large sites: 63 (church and a possible mosque); 162; 240 (Tel 'Ira)

Structures: 102; 123; 185 (structures and dwelling caves); 192 (× 2); 251 (pen)

Byzantine and/or Early Islamic:

Farmsteads: 32; 252 (early Islamic and maybe Byzantine)

These results can be tabulated as follows:

	<i>Byz</i>	<i>Prob Byz</i>	<i>EI</i>	<i>Prob EI</i>	<i>Byz + EI</i>	<i>Byz and/or EI</i>
Large Sites	3 (+ church at H. Hur [61], pottery not found)		3 (incl. 1 fortress)		3	
Farmsteads	4 (incl. 1 manor house)	2	5			2
Structures	6	5 (incl. 1 farmstead?)	3	1 (incl. 1 farmstead?)	5	
Watch-booths	3	2	1			
Forts	2	2				
Cisterns	2	2				
Other	1 (scattering of pottery)	1 (earlier fortress)				

The results of this analysis can be summarized as follows. At three of the large sites, one with a monastery and one with a church, occupation did not continue beyond the end of the seventh century. However, at three other large sites, one with a monastery and another with a church, occupation continued into the eighth and ninth centuries. In addition, two large sites and the fortress at Tuwaiyil el Mahdhi (68) appear to have been occupied only in the early Islamic period. The settlement pattern relating to farmsteads is similar. Three farmsteads have evidence only for Byzantine occupation; two more are probably Byzantine; another two are Byzantine and/or early Islamic; and five have evidence only for early Islamic occupation. There is thus an approximately equal number of Byzantine and early Islamic settlements and farmsteads, as well as some that were occupied during both periods. The only marked decline appears to be in the number of (small) forts, watch-booths, and cisterns, all of which are probably Byzantine in date. Of course, once dug, many if not all of the Byzantine cisterns probably remained in use through the early Islamic period; some are still used today. The disappearance of forts and watch-booths suggests that a greater real or perceived degree of security existed in the Yattir region during the early Islamic period.

Who were the inhabitants of these sites? Although occupation continued at some of the large sites during the early Islamic period, the survey evidence does not indicate whether any of the churches and monasteries continued to function after the seventh century. The final report on the excavations at Tel 'Ira (240) indicates that, although occupation continued through the eighth century, the monastery there was no

longer used for ecclesiastical purposes after the seventh century.²⁰¹ The Nestorian monastery at Tel Masos was also abandoned in the late seventh or early eighth century. Thus, although the existence of churches and monasteries attests to the presence of a Christian population throughout the region during the Byzantine period, the archaeological evidence does not provide a basis for determining whether at least some of the population remained Christian after the seventh century. On the other hand, an apparent mosque at one of the early Islamic farmsteads (216) points to Muslim presence by the eighth and ninth centuries.

201. In addition to the discussion of Tel 'Ira above, see R. Schick, *The Christian Communities of Palestine from Byzantine to Islamic Rule: A Historical and Archaeological Study* (Princeton: Darwin, 1995) 462.

CHAPTER 3

Settlement Processes and Patterns of Land Use

So she kept close to the maidens of Bo'az to glean to the end of the barley harvest and of the wheat harvest. (Ruth 2:23)

Settlement in the Yattir region has always been influenced by the local landscape, climate, and natural resources. This chapter therefore presents an overview of the region's geology, topography, climate, flora, and fauna. It also includes some modern ethnographic data, which help illuminate certain aspects of ancient settlement processes. For example, the kinds of crops grown by villagers in the Yattir region during the Ottoman Turkish period are suggestive of the area's agricultural potential in antiquity. The process of sedentarization of contemporary Negev Bedouin provides an important basis of comparison for ancient populations.¹ Accordingly, the modern ethnographic information presented in this chapter begins with a survey of the contemporary and pre-1967 Bedouin populations. This is followed by a summary of the settlement patterns and agriculture of the Yattir region in the late sixteenth century as indicated by Ottoman Turkish tax registers. A model proposed for the settlements on the island of Kea in the Cyclades during the Ottoman Turkish period provides interesting points of comparison with the Yattir region. The chapter concludes with an overview of the dry farming techniques used in this region, including the evidence provided by the Nesana papyri. Although none of the models presented here necessarily provides a complete and exact parallel for the settlement processes and patterns of land use in the Yattir region during the early Islamic period, various elements of each can assist in the interpretation of the archaeological remains.

The Landscape, Climate, and Natural Resources of the Yattir Region

The area surveyed by Y. Govrin was published by the Israel Department of Antiquities (now the Israel Antiquities Authority) as Map 139. This is an artificially defined area bounded by west–east points 140–150 and north–south points 080–070 on the Grid of Israel.² It therefore represents a man-made, not a natural unit. It is part of a larger zone called the Yattir region, which straddles the transition between two areas with different geomorphological, climactic, and vegetational characteristics.³ The line of transition bisects the surveyed area diagonally, running roughly from northwest to southeast through the center of the map.

1. See I. Finkelstein, *The Archaeology of the Early Israelite Settlement*, 21.

2. Govrin, *Map of Nahal Yattir*.

3. Z. Meshel, S. Ben-Yosef, and U. Dror, *The Yattir Region: A (Partial) Survey of the Landscape and Sites* (Tel Aviv: The Society for the Protection of Nature in Israel, 1987) (in Hebrew); I am grateful to David Amit for bringing this reference to my attention.

The area in the northeastern part of the map thus differs in significant ways from that in its southwest. As will be seen, the distinctions between these areas are dictated above all by the topography.

The surveyed area (Map 139) occupies the southwest quadrant of the Yattir region. The Yattir region has been defined as including roughly the area between the west–east points 140–160 and north–south points 090–070 on the Grid of Israel. It is located in the southern Hebron mountains, comprising a transitional geographical unit between the Judean mountains to the north and the northern Negev to the south. It derives its name from the ancient site of Khirbet Yattir (Iethira), in the northeastern quadrant of the region. The northern third of the region (centering on the sites of ‘Anim [Anaea] and Khirbet Yattir) lies in the southern part of the ancient *Darom*, in the southern Judean mountains (see the chapter on the *Darom*).

Two anticlines, which run in a northeast–southwest direction and lie at the end of the Hebron mountains, terminate more or less in the center of the surveyed area (Map 139), that is, in the southwestern quadrant of the Yattir region. These are the Dhahariyah anticline on the west and the Ma‘on anticline on the east. Their average height in the Yattir region ranges between 500 and 650 m above sea level. They form a sort of step between the Hebron mountains to the north (800–900 m above sea level), and the Be‘er-sheva‘ Basin (or valley) to the south (ca. 350 m above sea level). The high mountain of Har ‘Amasa (859 m above sea level) lies at the southern end of the Ma‘on anticline. The Yattir region lies on the Dhahariyah and Ma‘on anticlines and on the ridges and valleys between them.⁴ In antiquity, the major north–south roads in this region, which originated at Hebron to the north, followed these two anticlines into the Be‘er-sheva‘ Basin. The western road (Darb al-Sur), ran along the top of the Dhahariyah anticline, roughly corresponding with the course of the modern road from Hebron to the Shoqet Junction to Be‘er-sheva‘ to Halutza (Elusa). The eastern road, which is also followed by a modern road, ran along the top of the Ma‘on anticline, from Ziph to Carmel (Chermela/Chermoula) to Ma‘on to Malhata (Malatha) in the south. A major west–east road ran from Gaza to Be‘er-sheva‘ to Malhata to ‘Ein Boqeq. These ancient roads lay along the periphery of the Yattir region, enclosing it on the west, south, and east.⁵

A series of ridges and valleys (wadis) that flow from northeast to southwest into the Be‘er-sheva‘ Basin lie between the Dhahariyah and Ma‘on anticlines. The drainage basin of Nahal Besor occupies almost the entire Be‘er-sheva‘ region. The basin is bisected by the important tributary of Nahal Be‘er-sheva‘, which flows westward from Rosh Zohar.⁶ In the area of Map 139, at the southwestern end of the ridges we find (proceeding from west to east) the Yattir mountains (Harei Yattir), the ‘Anim mountains (Harei ‘Anim), and the ‘Ira mountains (Harei ‘Ira, which lie at the southern end of Har ‘Amasa). Proceeding from west to east, and starting with the Hebron–Be‘er-sheva‘ highway on the west, the main valleys running through the survey area are Nahal Hebron, Nahal Yattir, and Nahal ‘Anim.⁷ The secondary wadis in the surveyed area (Map 139) that flow into these (roughly from west to east) include Nahal Shoqet, Nahal Gez, Nahal Hur, Nahal Bikhra, Nahal Yeshu‘a, Nahal So‘a, Nahal Molada, Nahal Segor, and Nahal Beriah. Both the major and secondary wadis feed into Nahal Be‘er-sheva‘, which flows from east to west through the Be‘er-sheva‘ Basin. The Be‘er-sheva‘ Basin occupies the southwestern corner of the Yattir region (approximately the southwest third of Map 139) and constitutes a different geomorphological and topographic unit from the rest of the Yattir region.⁸

4. Meshel et al., *The Yattir Region*, 10–11.

5. Govrin, *Map of Nahal Yattir*, 14*–15*; E. Marx, *Bedouin of the Negev* (Manchester: Manchester University Press, 1967) 15.

6. Govrin, *Map of Nahal Yattir*, 13*; K. C. Gutwein, *Third Palestine: A Regional Study in Byzantine Urbanization* (Washington, D.C.: University Press of America, 1981) 65–66.

7. Govrin, *Map of Nahal Yattir*, 14*.

8. *Ibid.*; Meshel et al., *The Yattir Region*, 11.

Most of the bedrock visible on the hilltops and slopes of the ridges consists of Senonian chalk interspersed with layers of flint, and more rarely, Neogenian conglomerate or Cenomanian limestone and dolomite. The valley (wadi) beds and the tectonic depression of the Be'er-sheva' Basin are covered with layers of Aeolian loess whose landscape consists of moderate rolling hills. The loess, which is non-saline, becomes impermeable when brought into contact with water, and is easily blown about by sandstorms and eroded by flash-floods.⁹

The Yattir region has a semi-arid, desert (steppe) climate. There is a long dry season during the summer. The rainy season usually begins in October, continuing and intensifying, with increasingly greater amounts of rain, until it peaks, usually in January. This is followed by a sharp drop, though there is sometimes a second peak, usually around March. Rainfall during the second peak tends to reach about half the amount of the main (first) peak. The rainy season ends in April, though rain occasionally falls in May.¹⁰ Because of the maritime effect along the Mediterranean Sea, the mean annual rainfall at Gaza on the Negev coastal plain is about 371 mm, compared with 144 mm at Arad. This means there is a marked decrease in rainfall as one proceeds from west to east from the southern coastal plain. There is also a corresponding decrease in rainfall from north to south, especially where the southern Hebron mountains terminate at the Be'er-sheva' Basin. The mean annual rainfall in the Yattir region is 200–300 mm, with the surveyed area (Map 139) lying at the lower end of this scale because of its lower altitude and its location in the southernmost part of the region. A mean annual rainfall of 200–300 mm is sufficient for dry-land farming. However, wild fluctuations in the actual rainfall amounts cause frequent and extended periods of drought in the Yattir region. For example, in December 1966, 106 mm of rain fell, as opposed to 9 mm in December 1964, and 164.1 mm in December 1971; the mean annual rainfall for the month of December is 52.9 mm.¹¹ Because there are no perennial sources of fresh water (springs) in the surveyed area (Map 139), until recently, drinking water had to be provided artificially by means of wells, cisterns, and dams.¹²

The Yattir region has a hot, dry climate, with a mean annual temperature of 20 degrees Celsius. During the winter months (December to March), temperatures can fall as low as -5 degrees Celsius. In March and April, and October and November, temperatures average 25–30 degrees Celsius. Temperatures are consistently high during the summer (usually between 30–40 degrees Celsius), and the air is relatively dry. There are also daily fluctuations in temperature, which in the winter average 10–12 degrees Celsius, and in the summer 15–17 degrees Celsius. The relatively mild temperatures and winter rains promote the growth of spring vegetation (Arabic *rabi'a*), which creates carpets of annuals covering the land. From March to May, this vegetation is wilted by the dry, hot winds from the east and south (Arabic *khamsin*, Hebrew *sharav*) that occasionally affect the region during the dry months. By May, these winds have desiccated crop plants and animal pasture.¹³

Phytogeographically, the Yattir region represents a transitional zone between the Mediterranean woods of the Hebron mountains to the north and the Irano-Turanian vegetation of the deserts to the south and east.¹⁴ Over the centuries, human activity has altered the original appearance of the region. However, the

9. Govrin, *Map of Nahal Yattir*, 14*; Meshel et al., *The Yattir Region*, 11; J. D. Elliott, Jr., *The Elusa Oikoumene: A Geographical Analysis of an Ancient Desert Ecosystem Based on Archaeological, Environmental, Ethnographic, and Historical Data* (M.S. Thesis, Department of Geology and Geography, Cobb Institute of Archaeology, Mississippi State University, 1982) 18–20.

10. Meshel et al., *The Yattir Region*, 12–14.

11. Ibid.; Marx, *Bedouin of the Negev*, 20–23.

12. Govrin, *Map of Nahal Yattir*, 14*.

13. Marx, *Bedouin of the Negev*, 27–30; Meshel et al., *The Yattir Region*, 12; T. E. Levy, "The Emergence of Specialized Pastoralism in the Southern Levant," *World Archaeology* 15 (1983) 18.

14. Elliott, *The Elusa Oikoumene*, 21.

remains (isolated trees) of Mediterranean woods can still be seen in spots, especially along the northern and western borders of the region. Otherwise, the natural vegetation consists mostly of low bushes and shrubs (perennials) common in desert areas, and annuals that bloom in the early spring.¹⁵ Today the north-eastern quadrant of the Yattir region is covered with a forest consisting mostly of pine trees, planted by the Keren Kayemet LeIsrael (Jewish National Fund) since the 1960s. The line of trees terminates on the north and east at Israel's pre-1967 border with Jordan (the Green Line). This forest has radically altered the appearance of the region. Until the 1960s and 1970s, most of the wadi terraces and beds in the region were cultivated during the winter months by villagers from Samo'a, Raf'at, and Dhahariyah, and by Bedouin from the northern Negev and Be'er-sheva Basin. The area was also intensively grazed by sheep and goats. However, in the wake of the establishment of new Jewish settlements in the region, these activities have been greatly curtailed, and most of the Bedouin are now confined to the southwestern quadrant of the region (corresponding roughly with the surveyed area, Map 139).¹⁶ Aside from occasional larger animals such as gazelles, foxes, wolves, and hyenas, most of the wildlife inhabiting the Yattir region today tends to be small in size. These include various species of rodents, insects, reptiles, and birds.¹⁷

Some scholars have proposed that climactic conditions in the Negev changed in historical times and that the Roman-Byzantine period was wetter or more humid than today. They have even suggested that such changes brought about the decline of the great Byzantine towns of the Negev by putting an end to the intensive desert agriculture associated with them.¹⁸ Others have argued that climactic conditions in the Negev were very similar to today's.¹⁹ For example, M. Haiman has pointed out that, aside from the difficulty involved in proving that climactic conditions were actually better during the Byzantine period, those who believe in such a change disregard the archaeological evidence. This evidence not only attests to continuity but to a rise in settlement in the Negev during the early Islamic period, especially in harsh desert areas.²⁰ T. E. Levy has noted that similar increases of rainfall suggested for the Chalcolithic period in the northern Negev do not provide enough explanatory power to account for the changes in settlement patterns. Instead, these changes seem to be due to socioeconomic or political, not climactic factors.²¹ The evidence for ancient agricultural activity in the Yattir region supports the conclusion that climactic conditions during the Byzantine and early Islamic periods were very similar to today's.

15. Meshel et al., *The Yattir Region*, 15.

16. *Ibid.*, 15-17.

17. *Ibid.*, 34-35.

18. For example, see A. Issar and Y. Govrin, "Climactic Change and the Desertification of the Negev at the End of the Byzantine Period," *Cathedra* 61 (1991) 67-83 (in Hebrew). Also see U. Avner, "Settlement, Agriculture and Paleoclimate in the Uvda Valley, Southern Negev Desert, 6th-3rd Millennium BC," in A. S. Issar and N. Brown (eds.), *Water, Environment and Society in Times of Climatic Change* (Dordrecht: Kluwer Academic, 1998) 183-87, who has suggested that the climate of the Near Eastern deserts during the eighth to fourth millennia B.C.E. was somewhat wetter than today.

19. For example, see R. Rubin, "The Debate over Climactic Changes in the Negev, Fourth-Seventh Centuries C.E.," *Palestine Exploration Quarterly* 121 (1989) 71-78; G. Avni, *Nomads, Farmers, and Town-Dwellers: Pastoralist-Sedentist Interaction in the Negev Highlands, Sixth-Eighth Centuries CE* (Jerusalem: Israel Antiquities Authority 1996) 68-69.

20. M. Haiman, "Agriculture and Nomad-State Relations in the Negev Desert in the Byzantine and Early Islamic Periods," *Bulletin of the American Schools of Oriental Research* 297 (1995) 48.

21. *Ibid.*, 48; Levy, "The Emergence of Specialized Pastoralism," 31. For a similar opinion see I. Finkelstein and A. Perevolotsky, "Processes of Sedentarization and Nomadization in the History of Sinai and the Negev," *Bulletin of the American Schools of Oriental Research* 279 (1990) 73.

The Modern Bedouin of the Yattir Region

The southwestern quadrant of the Yattir region (roughly corresponding with the surveyed area, Map 139) is occupied by a number of Bedouin tribes, whose settlement extends to the west and south, well beyond the borders of the surveyed area. The Bedouin were settled here in the 1950s, after the establishment of the State of Israel. During the period of the British Mandate, most of the region down to about the line of the Shoqet Junction–Arad road belonged to the territory of the villages of Samo‘a and Dhahariyah, with Nahal Eshtamo‘a marking the border between the lands of the two villages. In the winter months the villagers grazed their flocks and herds in the region, during which time they lived in caves, among the ruins of ancient sites, and in tents. This seasonal transhumance served to enlarge the agricultural periphery around the villages and exploited a maximum amount of land for grazing and cultivation. Because of security considerations, the villagers did not establish permanent settlements in the region, returning instead each season to the safety of their villages. Thus, the region was only occupied seasonally.²²

In their 1987 study, Z. Meshel et al. listed the following tribes in the Yattir region: Abu Bl‘al and Abu al-Qi‘an occupied most of the land, with smaller areas occupied by families of the ‘Ataunah tribe.²³ Abu al-Qi‘an is actually a peasant group enjoying the official status of a tribe.²⁴ On the borders of the region the following tribes are listed: to the west, the rest of the families of the ‘Ataunah tribe; to the south, the Afenish tribe and some families of the Abu Rqaiq tribe; and to the east, beyond the ‘Ira ridge, the Abu Rbe‘ah tribe.²⁵ At the end of the British Mandate, there were approximately 55,000–65,000 Bedouin in the Negev, divided into 95 tribes. In 1967, only 16,000 Bedouin remained in the Negev, many having fled in the wake of Israel’s War of Independence in 1948.²⁶ Since Ottoman Turkish times, “tribes” (Arabic *‘ashirah*, pl. *‘asha’ir*) have been defined as territorial and administrative units led by elected chiefs whom the governing authorities recognize as official representatives of their followers. Tribes could combine into “confederations,” which were mainly larger territorial divisions whose contiguity was expressed in terms of common descent. There were eight such tribal confederations (Arabic *qabilah*, pl. *qaba’il*) prior to 1948. Most of the tribes of the two largest confederations also formed smaller territorial combinations, described by E. Marx as “groups of tribes.”²⁷ There is no Arabic term to denote such an association, though each group has a name. Thus, the Abu al-Qi‘an tribe belongs to the Hkuk tribal group; the ‘Ataunah tribe belongs to the Ntush tribal group; the Abu Rbe‘ah tribe belongs to the Zullam tribal group; and the Abu Rqaiq and Afenish tribes belong to the Qderat tribal group; all of these tribal groups belong to the Tiaha confederation.²⁸ Of the tribes listed in 1987 by Meshel et al. as occupying the Yattir region, only the Abu Bl‘al tribe does not appear in Marx’s list as well.²⁹

The Bedouin of the Yattir region are currently in a state of transition to permanent settlements. The majority are now sedentary, though a few families still move during the winter months to Nahal ‘Anim. The men tend to work in different industries in Be‘er-sheva‘; only a few, mostly older men, still earn a livelihood through agriculture or raising livestock. On the other hand, many of the families continue to raise livestock (mostly sheep and goats, with only a few camels) and cultivate land to supplement their income.

22. Meshel et al., *The Yattir Region*, 16, 20.

23. *Ibid.*, 22–23.

24. Marx, *Bedouin of the Negev*, 72; see below.

25. Meshel et al., *The Yattir Region*, 23.

26. Marx, *Bedouin of the Negev*, 12.

27. *Ibid.*, 10–11.

28. *Ibid.*, 11–13; Meshel et al., *The Yattir Region*, 22–23.

29. Meshel et al., *The Yattir Region*, 22–23; Marx, *Bedouin of the Negev*, 13. According to Meshel et al., *The Yattir Region*, 22, the Abu Bl‘al tribe belongs to the Tarabin confederation, which is listed by Marx, *Bedouin of the Negev*, 13, though the tribal group, Nb‘a‘at, does not appear in Marx.

Most of the herds spend the entire year far to the north, in the lowlands and coastal region around Hadera, and only small herds remain in the vicinity of the settlements. All of the land in the region, except for the Keren Kayemet LeIsrael forests, belongs to the Israel Lands Administration. The Bedouin lease this land on an annual basis from the Israeli government, usually collectively as families rather than individually.³⁰

The transitional nature of the Bedouin settlement in the Yattir region is reflected in their dwellings. They occupy a mixture of tents, corrugated tin or wooden huts (with poured concrete floors), and stone houses. Since the Israeli government plans to move the Bedouin out of most of this region and into permanent towns (such as Hura and Kuseifeh), they are forbidden to build dwellings of a more permanent nature. The Bedouin are therefore reluctant to invest money in the construction of permanent houses, though some of the wealthier families own stone houses. Sometimes the families have a tent next to a tin or wooden hut, which they use (as a *madh'afah*) for the entertainment of guests or occupy during the hot summer months. The winter tents are still made of the traditional black goat hair, but summer tents are now often made of sackcloth. Recently plastic has begun to be used for winter tents. The Bedouin obtain most of their water from ancient and modern cisterns throughout the region, sometimes bringing in large water containers on wheels. Beginning in the 1970s, new cisterns began to be dug near the villages. At the same time, the Bedouin began to clear out many of the ancient blocked cisterns.³¹

All of the uncultivated and unforested land in the Yattir region is utilized for grazing. The large herds spend the entire year far to the north, leaving only small herds in the area (except in drought years, when all of the herds are brought back to graze in the otherwise unproductive fields). Most of the shepherding is done by young girls, who complete their schooling at an earlier age than the boys. The average size of a herd ranges from 10 to 50 head, and it is not unusual for several shepherds to join their flocks together during the day. Since the shepherds return to their village each night, their range is limited to the distance they can traverse on foot in one day. Thus, the immediate areas surrounding each village tend to be overgrazed.³²

Almost all of the available and cultivatable land in the Yattir region is exploited by the Bedouin for agriculture. Only winter crops are grown, barley being the primary crop. The cultivation is done by each family separately, though hired help may be employed for such activities as threshing and plowing. The sowing is done mostly by hand, after the first rains, while plowing tends to be mechanized. The yield is very low. In a good year the Bedouin harvest about 50 kg of seeds per dunam. However, the yield rarely exceeds 50 kg per dunam, and it is often much lower. In the latter case the fields are then used for grazing purposes. Although almost every available inch of land is cultivated, the Bedouin investment in agriculture is minimal. For example, they do not build dams or terrace walls, or even repair existing ancient ones. They do, however, create earthen dams in wadi beds, leaving space on the side so that rain or flood waters can pass to the next plot.³³

The group within which economic activities are carried out is generally the family, either in its nuclear or extended form. Most men engage in both farming and herding, and at the most put more emphasis on one than on the other. Since groups of agnates often hold land in the same area, they are at times able to live in close proximity, or even in one camp, and to cooperate in certain economic activities, such as reaping. Sometimes several men will take outside employment together and leave their families in the care of kin in the joint camp. The people living in these camps combine for various purposes in territorial and political groups. The widest political associations of the Bedouin today are the sub-tribe (*ruba'*, pl. *rubu'*),

30. Meshel et al., *The Yattir Region*, 23–24.

31. *Ibid.*, 24–25, 30–32. For a similar process of sedentarization in modern Syria, see N. N. Lewis, *Nomads and Settlers in Syria and Jordan, 1800–1980* (Cambridge: Cambridge University Press, 1987) 187–90.

32. *Ibid.*, 28–29.

33. *Ibid.*, 29–30; Marx, *Bedouin of the Negev*, 19.

and tribe, which formerly waged war but are now administrative units. A sheikh (elder) stands at the head of each tribe. He is an elected leader through whom most of the communications between the tribesmen and the governing authorities flow. The tribe is not a landholding group and its boundaries are not as clear-cut as those of the confederation, but in general its constituent groups hold farming land in roughly contiguous areas and exploit the same pastures.³⁴ Tribes are now composed of people originating from different stocks, who are classed into three categories: the dominant Bedouin stock, whose members do not necessarily make up the majority of the tribe (Bedouin call themselves Arabs [Arabic 'arab]); groups of peasants (Arabic *fallah*, pl. *fallahin*), originating from the cultivated areas bordering on the desert; and groups of "slaves" (Arabic 'abd, pl. 'abid), descendants of the black slaves formerly kept by the Bedouin.³⁵ The gradual pacification of the area by the Ottoman authorities since the 1870s has created suitable conditions for the permanent settlement of peasants in Bedouin areas.³⁶

Pastoralists and Agriculturalists

Haiman employs the term "nomad" to refer to seminomads engaged in sheep and goat husbandry and seasonal farming.³⁷ M. B. Rowton has described this type of nomadism, in which a tribe has both sedentary and nomadic elements, as "enclosed nomadism."³⁸ The Bedouin of the Negev during the first half of the twentieth century typified this kind of nomadism. Unlike similar societies living in better environmental conditions, the harsh desert environment makes the Negev Bedouin dependent on permanent settlers for their subsistence. Although the Negev Bedouin engage in sheep and goat husbandry and seasonal agriculture, they cannot support themselves on those activities. These Bedouin move within a very limited area and tend to maintain close economic ties with permanent settlers. They derive the bulk of their food resources from administrative and economic relations with the state authorities and permanent settlers, with herding and agriculture constituting a secondary source of subsistence. Under conditions of political stability like today's, the Bedouin may gradually become permanent settlers. They differ from nomads such as those living in the Eurasian steppes, who mainly raise one type of animal (such as deer, horses, or camels) and move in seasonal cycles over an area spanning hundreds of kilometers.³⁹

The proximity of villagers and Bedouin in marginal areas such as the Yattir region promotes interaction and interdependence. Less sedentary populations herd animals on the fringes of cultivated areas bordering the desert. They obtain grain from farmers and graze their herds on the stubble of cultivated fields.⁴⁰ Transhumance, the seasonal movement of people and animals (typically sheep and goats) from lowlands to

34. Marx, *Bedouin of the Negev*, 62–63.

35. *Ibid.*, 63.

36. *Ibid.*, 74–78.

37. Haiman, "Agriculture and Nomad-State Relations," 48–49 n. 1.

38. See, for example, M. B. Rowton, "Dimorphic Structure and the Parasocial Element," *Journal of Near Eastern Studies* 36 (1977) 181, 196; G. London, "A Comparison of Two Contemporaneous Lifestyles of the Late Second Millennium B.C.," *Bulletin of the American Schools of Oriental Research* 273 (1989) 40.

39. *Ibid.*, 40; Meshel et al., *The Yattir Region*, 23–24; Marx, *Bedouin of the Negev*, 23, 52–53; Rowton, "Dimorphic Structure and the Parasocial Element," 196.

40. Ø. S. LaBianca, *Sedentarization and Nomadization: Food System Cycles at Hesban and Vicinity in Transjordan* (Berrien Springs, Mich.: Andrews University Press, 1990) 34; Levy, "The Emergence of Specialized Pastoralism," 16, 23–24. Lewis noted that tensions and conflict between pastoralists and agriculturalists often arose over the damage to crops caused by the grazing of livestock: "Bedouin could and often did co-exist peacefully with villagers, but were nevertheless usually perceived as a danger to the lives and property of the sedentary population. . . . For the rural population, it was the numbers of beduin livestock as much as their arms or predatory habits which made them a menace" (Lewis, *Nomads and Settlers*, 12).

highlands in search of pasture, complements other food-production strategies. In many cases, transhumants occupy permanent homes and villages in the winter season, moving into tents only in the spring and summer in order to follow their flocks.⁴¹ They may also cultivate wheat and barley. Because of the marginal nature of the Yattir region, various combinations of food-production strategies have been employed over the centuries, blurring the distinctions between pastoralists and agriculturalists. E. B. Banning has proposed that conflicts over resources between these populations in southern Palestine have traditionally been minimized or resolved through the complementary scheduling of agricultural and pastoral activities.⁴² The proximity of these populations also results in fluidity, with individual households gradually becoming more nomadic or more sedentary. Such shifts appear to be due mainly to social, political, and economic factors.⁴³ Since sedentary cultivators are more vulnerable and can be exploited (or taxed) more easily than nomadic pastoralists, the process of sedentarization of rural households tends to be a direct result of the policies and actions of the state.⁴⁴ As P. C. Salzman has noted, sedentarization represents one kind of "response to changing pressures, constraints, and opportunities both internal and external to the society."⁴⁵ Thus, during periods of a strong central government, the Yattir region was more densely settled and intensively cultivated than during times of a weak central authority.⁴⁶

The current process of sedentarization of the Negev Bedouin began at the end of the Ottoman Turkish period. Haiman has noted that, whereas, during the Byzantine and early Islamic periods, contacts between seminomads and permanent settlers took place in the heart of the Negev, during the Ottoman period (1517–1917), these contacts occurred in sedentary lands to the north, that is, in the Be'er-sheva' Basin and north of it.⁴⁷ This is because, by the end of the Ottoman period, the area of permanent settlement in southern Palestine had contracted to the line of the Gaza-Ramla-Jerusalem road. The distribution of Bedouin tribes at the end of the Ottoman period indicates that they were on the frontier of these permanent settlements. Most of the 95 tribes were concentrated in the area extending south of Ramla to the Be'er-sheva' Basin. Though the annual rainfall in the area is sufficient for the cultivation of grains, there is no evidence of Bedouin sedentarization or agricultural activity as long as the Ottomans neglected this area. South of the Be'er-sheva' Basin the Bedouin population declined drastically. At the end of the nineteenth century, the Ottomans formulated a comprehensive plan for the urban and agricultural development of the area, whose central feature was the establishment of the city of Be'er-sheva' in the heart of Bedouin territory. The British (1918–48) adopted a policy of support for the Bedouin to prevent starvation and disaster. Under these conditions, the Bedouin began to engage in agriculture and initiated spontaneous scattered settlement in

41. Tent-dwellers are not necessarily nomads or seminomads; recent tent camps in the Negev and Sinai were inhabited by Bedouin populations who practiced only short-distance migration, two to three times a year, to adjust to the seasons and seek fresh pastures; see Avner, "Settlement, Agriculture, and Paleoclimate," 154.

42. Banning, "Peasants, Pastoralists and *Pax Romana*," 25–50. Also see P. Mayerson, "Saracens and Romans: Micro-Macro Relationships," *Bulletin of the American Schools of Oriental Research* 274 (1989) 71–79.

43. LaBianca, *Sedentarization and Nomadization*, 36–37; Finkelstein and Perevolotsky, "Processes of Sedentarization and Nomadization," 72.

44. LaBianca, *Sedentarization and Nomadization*, 42.

45. P. C. Salzman, "Introduction: Processes of Sedentarization as Adaptation and Response," in P. C. Salzman (ed.), *When Nomads Settle: Processes of Sedentarization as Adaptation and Response* (New York: Praeger, 1980) 14.

46. However, the low-intensity use of land by Bedouin does not necessarily mean it was neglected and mismanaged. In fact, some scholars have suggested that modern overdevelopment of marginal lands causes greater degradation to the environment than did the centuries of "neglect" under Muslim rule; see LaBianca, *Sedentarization and Nomadization*, 215; N. Swidler, "Sedentarization and Modes of Economic Integration in the Middle East," in Salzman (ed.), *When Nomads Settle*, 30. In modern Syria, Lewis has noted that "The extension of cultivation, the growth of the sheep population and current competitive methods have very seriously damaged the vegetation of the steppe and desert" (Lewis, *Nomads and Settlers*, 186).

47. Haiman, "Agriculture and Nomad-State Relations," 46.

tents and huts, which culminated in the 1960s under the Israeli government. Although the agricultural activity of the Bedouin during this period was rarely cost effective, the government encouraged them to settle and subsidized farming during drought years. This stage of spontaneous settlement ended in the 1980s, when the Bedouin, under state-initiated sedentarization, were encouraged to move to towns. In this region, therefore, nomadism and sedentarism have been affected more by geopolitical conditions than by the natural environment.⁴⁸ Increased agricultural settlement causes a parallel increase in pastoralism, and visa versa. Conversely, it can be assumed that the neglect of the frontier by the state due to political and economic weakness, as in southern Palestine at the end of the Ottoman period, led to a decline in permanent settlements. Without economic support from the state, the population of desert settlers, which grew far beyond the capacity of the area to support them, remained exposed to the poor environment that could not sustain them, and most were forced to abandon the area. Haiman has made the important point that the desert frontier is not on the border of the natural desert but rather on the border of permanent settlements. When the frontier was neglected, even fertile areas became desolate. When the frontier was controlled and supported by the state, areas in the heart of the desert became fertile agricultural lands.⁴⁹

The Yattir Region during the Ottoman Turkish Period

In the sixteenth century,⁵⁰ the Ottomans conducted several fiscal surveys that counted population and revenue. The information was recorded in registers (including detailed registers, called *Daftar-i Mufassal*) that list the revenues from each town quarter, village, and tribe on the basis of population, local resources, and commercial facilities.⁵¹ The last detailed census (*Daftar-i Mufassal*), conducted in 1596–97, provides information on a number of villages in the northern half of the Yattir region at the end of the sixteenth century.⁵² In the Ottoman administrative system, this region occupied the southern part of a *liwa* (large fiscal

48. Ibid., 46–48.

49. Ibid. For Syria in the nineteenth and twentieth centuries, see N. N. Lewis, "The Frontier of Settlement in Syria, 1800–1950," in C. Issawi (ed.), *The Economic History of the Middle East, 1800–1914* (Chicago: University of Chicago Press, 1966), especially 258–60. The same observation was made in the nineteenth century by Melchior de Vogüé, who had just concluded his archaeological survey of Syria; Lewis, *Nomads and Settlers*, summarizes de Vogüé's observations as follows: "The limits of the intermediate zone were not fixed; they depended on politics more than geography, particularly on the eastern border, because the desert 'is an economic rather than a geographical expression.' The desert was not necessarily arid and uncultivable, but rather the area in which the nomads wandered and which was devastated by their flocks and herds. When, as a result of neglect and feebleness on the part of the government, the tribes invaded the cultivated area, population and cultivation disappeared, weeds filled the fields, and the desert advanced . . ." (pp. 23–24). Bunimovitz, "Socio-Political Transformations," has noted a similar phenomenon in Bronze Age Palestine: ". . . under proper conditions of regional development and public security, the Palestinian frontier was pushed away to the east and south, with the lowlands enjoying a great deal of settlement stability and a corresponding degree of importance. In the absence of these conditions the opposite was true: the lowlands turned into a frontier, and the importance of the hill country rose at their expense" (p. 197).

50. The main source for this section is W.-D. Hutteroth and K. Abdulfattah, *Historical Geography of Palestine: Transjordan and Southern Syria in the Late 16th Century* (Erlangen: Frankischen Geographischen Gesellschaft, 1977).

51. R. M. Brown, *Late Islamic Ceramic Production and Distribution in the Southern Levant: A Socio-economic and Political Interpretation* (Ph.D. dissertation, State University of New York at Binghamton, 1992) 104; R. Schick, "The Archaeology of Palestine/Jordan in the Early Ottoman Period," *ARAM* 9–10 (1997–98) 566.

52. This is the census published by Hutteroth and Abdulfattah, *Historical Geography of Palestine*. Because of potential corruption and because the Ottoman fiscal administration was less efficient in desert frontier regions (such as the Yattir region), the data in these registers might not be as accurate and reliable as Hutteroth and Abdulfattah believed; see Brown, *Late Islamic Ceramic Production*, 105–6; Schick, "The Archaeology of Palestine/Jordan," 566. I am grateful to Robin Brown for bringing this to my attention and for the references she provided.

area) called Quds as-Sarif, or just Quds (corresponding with Jerusalem). *Liwas* were subdivided into smaller administrative units called *nahiyas*.⁵³ The Yattir region was part of the *nahiya* Halil (Hebron). In the late sixteenth century, the frontier of permanent settlements in this region corresponded more or less with the 250 mm isohyete.⁵⁴ The term *mazraʿa* denoted an agricultural area with no permanent settlements in it. The southern part of the *nahiya* Halil, which corresponds with the southern part of the Yattir region, is described in these Ottoman documents as *tabiʿ barriyya*, or “belonging to waste land,” for more than a hundred *mazraʿas*. However, the fact that incomes from *mazraʿas* appear on these documents indicates that they could be cultivated, even if there were no permanent settlements. It is unclear whether such *mazraʿas* were cultivated by villagers or Bedouin. Perhaps for the purposes of registration and taxation they were too widely scattered to be attributed to particular villages. The *mazraʿas* were usually small and dispersed arable areas, lying within a village area but apart from its main fields. Hutteroth and Abdulfattah have suggested that the distance of a *mazraʿa* from the main fields of a village is part of the definition of this term.⁵⁵ This situation appears to be analogous to that described by Meshel et al. as characteristic of the Yattir region before 1967, when villagers camped out in caves in the region and seasonally cultivated the fields.⁵⁶ Although in the Ottoman tax registers the income from *mazraʿas* is always mentioned as a lump sum instead of being broken down among various crops, it is reasonable to assume that grain made up the bulk of the total agricultural product.⁵⁷ The revenue from *mazraʿas* accounted for about one-sixth of the total income in the *liwa* Quds at the end of the sixteenth century.⁵⁸

About four-fifths of the estimated population of 42,155 living in the *liwa* Quds at the end of the sixteenth century were Muslims.⁵⁹ Most of the rest were Christians, with a very small number of Jews.⁶⁰ The permanent villages tended to be small, rarely exceeding 500 inhabitants.⁶¹ The concentration of villages in the mountainous and hilly regions reflected both natural conditions and security considerations.⁶² Even the towns were small, with approximate populations of 8,000 in Jerusalem, and 3,500 in Halil.⁶³ The only nomadic tribes whose presence can be established in the *nahiya* Halil are the ʿU. Yatim (ʿAwazima) in the northeastern corner of the region and the ʿU. B. Haytam (Hutaym) in the southwestern corner of the region.⁶⁴ These nomads comprised only a tiny percentage of the total population of the *liwa* Quds at the end of the sixteenth century. Instead, the village population constituted just under $\frac{3}{4}$ of the total; about $\frac{1}{4}$ of the population lived in towns; and the remainder were nomadic tribes.⁶⁵

53. Hutteroth and Abdulfattah, *Historical Geography of Palestine*, 17–18.

54. *Ibid.*, 45.

55. *Ibid.*, 29.

56. Meshel et al., *The Yattir Region*, 20.

57. Hutteroth and Abdulfattah, *Historical Geography of Palestine*, 29.

58. *Ibid.*, 96, fig. 10.

59. *Ibid.*, 43.

60. *Ibid.*, 40, fig. 4.

61. Hutteroth and Abdulfattah (*ibid.*, 47) noted that there is no support for Amiran’s conclusion that larger villages existed toward the Bedouin frontier, at least not in the late sixteenth century; see D. H. K. Amiran, “The Pattern of Settlement in Palestine,” *Israel Exploration Journal* 3 (1953) 71, “Here the pattern of settlement has to be more widely spaced, with larger villages than those in other parts of the country. Functionally, every village in the frontier area takes the place of a number of villages in the interior of the settled area. Frontier villages are therefore comparatively large, not only in population but in extent of village lands as well.”

62. Hutteroth and Abdulfattah, *Historical Geography of Palestine*, 47.

63. *Ibid.*, 52.

64. *Ibid.*, 49, fig. 5.

65. *Ibid.*, 51, fig. 6; 96, fig. 10.

At the peak of the Ottoman Empire in the sixteenth century, a fairly high percentage of the arable land in Palestine was under cultivation. There was not much more space for the extension of agricultural settlements, at least not with the traditional methods of that time and the classical "wheat-vine-olive" pattern of agriculture. The extent of the settled area more or less corresponded at this time with the extent of grain cultivation.⁶⁶ After the sixteenth century there was a steady period of decline in settlement density and economic prosperity, connected with the general decline of the Ottoman Empire. As the central government weakened, powerful nomadic tribes caused the destabilization of rural settlement areas. The villages near the frontier suffered most, until one after another they were abandoned. These were mainly the villages of the steppe, within the 250-mm isohyete. The proximity of the arable lands in the steppe regions to the seasonal grazing lands used by Bedouin made fields and farming villages easy targets for raids. By the late nineteenth century, the frontier had retreated, the density of villages was lower in most areas, and the percentage of nomads was higher, though the towns had grown in number and relative importance, and the average size of the villages seems to have been larger.⁶⁷ The area south of Hebron appears to have been almost totally abandoned, and the population around it and to the north had significantly decreased.⁶⁸ The Jahalin tribe had moved into the southern part of the Yattir region.⁶⁹ Since Palestine became the focus of European archaeological exploration precisely at this time, early explorers formed the impression that the country had lain desolate throughout the entire period of Ottoman rule. This impression, which is still embedded in modern scholarship, is often projected backward to begin with the Muslim conquest.⁷⁰

W.-D. Hutteroth and K. Abdulfattah list the villages of the *nahiya* Halil and their revenues at the end of the sixteenth century.⁷¹ The largest village to the south of Hebron was Yatta (Z 250), with a population of about 500. In the nineteenth century, Yatta, Dura², and Zahiriyya were the most advanced outposts south of Hebron. In the sixteenth century there were at least six more permanent villages farther to the south.⁷² These included the villages of Samo'a (Eshtamo'a) (M 242), with about 100 inhabitants, and, farther to the south, Guwayn al-'Ulya (M 241), with about 250 inhabitants. The latter appears to lie in the vicinity of 'Anim (Anaea). No more villages are recorded to the south of this. To the north and west of the last two villages, that is, south and west of Yatta, were the villages of Simya Burin (Abu Hasan) (Z 252), with about 100 inhabitants, and Suwaykat Bani Qays (Z 255), with about 250 inhabitants. Of the above, only Yatta and Samo'a were still inhabited in the late Mandatory period (and still are today). The Ottoman tax registers attest to the kinds of agricultural products grown in the region in the late sixteenth century. Wheat and barley accounted for at least half of the taxable produce in all of the above villages except Suwaykat Bani Qays, with wheat predominating. Other products included summer crops, such as sorghum, beans, vegetables, and melons, and goats, sheep, and bees, and fruit trees including vines. Olives and olive oil were apparently produced at Yatta and Suwaykat Bani Qays, but do not appear among the taxable items from Samo'a and Guwayn al-'Ulya.⁷³ The fact that the southernmost recorded village, Guwayn al-'Ulya, appears to lie in the vicinity of 'Anim means that the southern edge of permanent settlement in the late sixteenth century corresponded more or less with the southern boundary of the old district of the *Darom*.

66. *Ibid.*, 54, 84.

67. *Ibid.*, 56, 62.

68. *Ibid.*, 57, fig. 7.

69. See LaBianca, *Sedentarization and Nomadization*, 79, fig. 3.9.

70. Silberman, "Desolation and Restoration," 82.

71. Hutteroth and Abdulfattah, *Historical Geography of Palestine*, 122–24; also see charts 1 and 5 at the end of the volume.

72. W.-D. Hutteroth, "The Pattern of Settlement in Palestine in the Sixteenth Century," in M. Ma'oz (ed.), *Studies on Palestine during the Ottoman Period* (Jerusalem: Magnes, 1975) 7.

73. Hutteroth and Abdulfattah, *Historical Geography of Palestine*, 122–24; also see charts 1 and 5 at the end of the volume.

The Model of the Ottoman Period Cyclades

It is interesting to consider the history of the Ottoman period Cyclades⁷⁴ in connection with the question of whether the density of settlement reflects a lack of cultivation or exploitation of the land. As in southern Palestine, few remains of the medieval (Frankish and Ottoman) period have been identified in surveys in the Cyclades. For example, although we know that populations of substantial size resided in the settlement at Chora on the island of Kea, they appear to have left little in the way of archaeologically identifiable remains in the countryside. On the other hand, contemporary documents attest to the cultivation of much of the island during the Frankish and Ottoman periods. The main reason for this archaeological invisibility appears to be that small farmsteads were widespread in the Kean countryside only during certain periods. However, as in the case of the Yattir region, the absence of small farmsteads does not mean that the countryside was not under cultivation. Instead, at least in the case of Kea, it reflects the structure of land ownership.

According to J. L. Davis, the structure of land ownership can be ascertained by distinguishing between traditional and alternative systems of cultivation in Mediterranean agriculture. In the traditional system, the cultivation of wheat and barley dominates, with local specialization in vines and olives; bare-fallowing on a two-year rotation is characteristic; and land-holdings are scattered. Herds of livestock tend to be large, and, since grazing potential is limited in lowland pastures, the seasonal exploitation of uplands and transhumant pastoralism is common, the result being that manure is deposited far from the cultivated fields. In the alternative system, grain crops are rotated with pulses, while animals are tended in small herds, making year-round grazing near residences and the manuring of fields more feasible. The traditional, or extensive system is underproductive, since cereal fields may be left uncultivated for considerable periods of time. The alternative system is intensive, but requires more labor.⁷⁵ Davis's traditional system corresponds roughly with Ø. S. LaBianca's mixed agropastoralism system, while his alternative system corresponds roughly with LaBianca's moisture maximization system of dry farming (see below).⁷⁶ According to Davis, these systems produce distinctive patterns of residence. A farmer who lives in a nucleated settlement generally works fragmented holdings, often at some distance from his place of residence. On the other hand, dispersed residences, such as small, scattered farmsteads, imply the consolidation of land-holdings and reflect the alternative system. Increased settlement outside main centers can thus be seen as a reflection of an agricultural strategy that seeks to maximize output from subsistence production on a given acreage of land. This system increases the productivity of the land by using drainage and irrigation systems, terraces, and dams.⁷⁷ The alternative system characterized the southern Yattir region during the Byzantine and early Islamic periods, while the traditional system characterized it during the late sixteenth century and in the twentieth century before 1967. Thus, the absence of rural farmsteads implies that the yield of subsistence crops per unit of cultivated land—that is, the productivity of the land—was lower than in times when rural farmhouses were relatively frequent. According to Davis, the capacity of a given unit of land to satisfy the immediate calorific requirements of a larger or smaller population through the consumption of crops produced on that land should be distinguished from the overall capability of the same unit of land to generate surplus wealth. He refers to the latter as the "production" of the land, as opposed to productivity.⁷⁸

74. The main reference for this section is J. L. Davis, "Contributions to a Mediterranean Rural Archaeology: Historical Case Studies from the Ottoman Cyclades," *Journal of Mediterranean Archaeology* 4 (1991) 131–215.

75. *Ibid.*, 138.

76. See LaBianca, *Sedentarization and Nomadization*, 34–36.

77. Davis, "Contributions to a Mediterranean Rural Archaeology," 138–39.

78. *Ibid.*, 140.

Davis demonstrates that acorn caps (Greek *velanidi*), not excess products of subsistence agriculture such as grain, were cultivated on Kea to generate the revenues necessary to meet Ottoman levies.⁷⁹ The medieval Ottoman countryside was under intensive cultivation to produce this cash crop. The farmers at this time lived in the only permanent settlement on the island (Chora) and traveled to their fields from their base. Thus, the existence or nonexistence of small scattered farmsteads, or the visibility or invisibility of archaeological remains in the rural countryside does not necessarily reflect the level of absolute production generated by the local economy.⁸⁰ Instead, the principal factor determining numbers of rural sites in a given period is the productivity of subsistence agriculture, a variable that has not necessarily been correlated with total production. On Ottoman Kea, the elite were concerned with the production of a cash crop instead of with the intensification of subsistence agriculture.⁸¹ This means that control of the local economy by a minority of the population could have a significant impact on patterns of rural settlement by promoting the cultivation of a cash crop and discouraging the establishment of dispersed farmsteads.⁸² In other words, like Haiman and LaBianca, Davis suggests that land usage patterns are determined largely by social, political, and economic circumstances.

While there is no evidence to suggest that a specialized cash crop analogous to *velanidi* was produced in the Yattir region during the Ottoman Turkish period, several aspects of the Kea model are relevant to this discussion. First, the absence of archaeologically visible remains such as farmsteads does not necessarily reflect the noncultivation or exploitation of the countryside. As has been seen, Ottoman tax registers and other evidence from before 1967 suggest that the southern part of the Yattir region was at least partially cultivated on a seasonal basis in the sixteenth and twentieth centuries by the inhabitants of villages further to the north and probably by Bedouin as well. As on Kea, during these periods the pattern of settlement in the Yattir region was one of a few nucleated villages that served as bases for the cultivation of the countryside. The villagers could have lived in caves or temporary dwellings during seasonal cultivation, and small, scattered farmsteads that do not appear on the Ottoman Turkish tax registers may have existed. LaBianca has described a similar phenomenon of seasonal villages in the Hesban region of Transjordan during the Ottoman Turkish period.⁸³ In the winter the villagers occupied caves near cultivated fields, and in the summer they lived in tents near pastures. This strategy enabled them to concentrate their energies on cultivation during the wheat-growing season, while evading the Ottoman tax collectors. Typically, seasonal villages flourished during periods when villages, in the traditional sense of clusters of permanently occupied stone buildings, were abandoned.⁸⁴

The second relevant aspect of the Kea model is that the presence or absence of small, dispersed farmsteads in the countryside may reflect the structure of land-ownership. It is interesting to note that the late sixteenth-century villages of the Yattir region discussed above were classified in the Ottoman tax registers as either *hass mir liwa* ("property of the *mir liwa*") or as *za'amas* ("large military fiefs"). The former represented the income of the Sanjaq Bey, who was the military governor and commander of the feudal troops and usually received the taxes from the towns and villages.⁸⁵ The collapse of the Turkish feudal system at the end of the sixteenth century and the development of the system of tax farming had a disastrous effect on the rural population. The officially protected (and at the same time state-supporting) feudal class was

79. *Ibid.*, 171.

80. *Ibid.*, 171, 196.

81. *Ibid.*, 195–97.

82. *Ibid.*, 199.

83. LaBianca, *Sedentarization and Nomadization*, 227–28.

84. *Ibid.*

85. Hutteroth and Abdulfattah, *Historical Geography of Palestine*, 99.

replaced by tax collectors, who were usually indigenous chiefs of tribes and village sheikhs.⁸⁶ As a result, the Bedouin moved into the marginal lands abandoned by the rural population. Once the Bedouin started moving in, raids could not be prevented and more and more land was abandoned.⁸⁷

This review indicates that at least parts of the Yattir region have always been cultivated; the difference lies in the degree and level of intensity of cultivation, reflecting the degree of sedenterization or nomadization of the population, and the types of food production strategies employed. LaBianca has described this as the dynamic nature of food systems, with periods of intensification and abatement.⁸⁸

Dry Farming Techniques in the Yattir Region and the Negev

The prevalent method of field cultivation in the Yattir region has always been dry farming. LaBianca has described the two principle methods of dry farming as moisture maximization (corresponding with Davis' alternative system), and mixed agropastoralism (corresponding with Davis's traditional system). The former employs different techniques, including seasonal plantings of fast-maturing varieties, scattered plantings of drought-resistant crops, careful weeding and mulching practices, the use of moist bottomlands, and the construction of terraces and dams to trap run-off water.⁸⁹ The use of these techniques increases the agricultural yield, and supported the relatively dense settlement found throughout southern Palestine during the Byzantine and early Islamic periods. Mixed agropastoral dry farming is less labor intensive than moisture maximizing dry farming. It involves raising field crops such as wheat, barley, and lentils on arable plains, and grazing sheep and goats on stubble fields and on nearby mountain slopes and desert pastures. Fruits and vegetables can be grown in garden plots or orchards around the villages.⁹⁰

Field crops such as wheat and barley have traditionally predominated in the Yattir region. One reason for this is that in periods when security was a problem, crops requiring more than one growing season to bear fruit, such as vine and tree crops, were too risky to plant. Once a field has been sown, it requires very little tending under dry farming conditions, and a crop usually matures within a period of four to five months. After the crop has been harvested, the field can either be planted again, or herds of animals can be grazed on the stubble. Thus, field crops and livestock production are intertwined.⁹¹ The fact that this combination of dry farming and animal husbandry has persisted for millennia indicates its long-term stability and resilience.⁹²

During the sixteenth and twentieth centuries, when settlement in the Yattir region was focused on nucleated villages with few or no farmsteads (though seasonal villages may have existed), the agricultural regime appears to correspond with Davis's traditional system (LaBianca's mixed agropastoralism). The dry farming system was based on practices that facilitate the infiltration of rain into the soil. It is entirely dependent on direct precipitation, using the water that falls on the soil and is absorbed where it falls. To ensure the maximum amount of absorption, fields must be plowed and cultivated to create open surfaces for the reception of moisture.⁹³ Davis described this system as underproductive, since cereal fields may be left

86. Hutteroth, "The Pattern of Settlement in Palestine," 9.

87. Hutteroth and Abdulfattah, *Historical Geography of Palestine*, 58, 62.

88. LaBianca, *Sedentarization and Nomadization*, 106.

89. *Ibid.*, 35.

90. *Ibid.*, 36.

91. *Ibid.*, 37.

92. Levy, "The Emergence of Specialized Pastoralism," 15.

93. M. Evenari, L. Shanan, and N. Tadmor, *The Negev: The Challenge of a Desert* (Cambridge: Harvard University Press, 1982) 2.

uncultivated for long periods. The more intensive agricultural production that characterizes Davis's alternative system was made possible by what LaBianca refers to as moisture maximalization techniques of dry farming. These techniques, which are described by M. Evenari, L. Shanan, and N. Tadmor as runoff agriculture, utilized surplus rainwater runoff from the slopes of hills and the flash flood waters in the wadis (riverbeds). They are well known from the experimental farms and studies of Evenari et al., and the papyri and archaeological finds from Nessana. Evenari et al. distinguished three types of such agricultural systems: individual terraced narrow wadis; terraced fields with farmsteads; and extensive long terraces on floodplains adjacent to the large wadis of the area.⁹⁴

The individual terraced narrow wadis consisted of terraces with a wall of stones built at right angles to the wadi. Behind the walls, the wadi was filled with silted loess soil. These terraces represent ancient erosion and flood-control structures, in which floodwater flowed down from terrace to terrace. During the flow, some water sank directly into the terrace soil and some collected behind the terrace walls to penetrate later into the ground. The wetting of the terrace soils enabled them to be put to agricultural use. Evenari et al. regarded this as the simplest and most primitive floodwater-use system in the Negev.⁹⁵ The groups of terraced fields with farmsteads were surrounded by stone fences. Adjoining the fence and within its boundaries are often the remains of a farmhouse or a watchtower. Such farm units are always located in small tributary wadis surrounded by barren hillsides. All of the one hundred units studied by Evenari et al. included the same two basic features: a cultivated terraced area in the wadi bottom and a catchment area divided up into subcatchments by water conduits. The conduits ran diagonally down the slopes of the adjacent hillsides and collected surplus runoff rainwater. Since the loess soils on the slopes of the hills form a water-impermeable crust when wet, even during periods of light rainfall there is surface runoff. Because these units took advantage of this phenomenon and could collect runoff even under low rainfall conditions, Evenari et al. described them as "runoff farms." The conduits divided the drainage area into a number of smaller catchment basins, with each conduit often leading the runoff to a specific terraced field. In this way, the overall runoff water was divided into small streams of water, preventing large flash floods. Drop structures, spillways, ditches, and dividing boxes gave the farmer control over the distribution of the water in the farm and helped prevent erosion. The terrace walls allowed water to be collected in the terraced field, where it could soak into the soil and be stored for subsequent use by the crops.⁹⁶ Diversion systems, which represent the third type, entailed the construction of large, intricate structures. These systems were not based on small watersheds but on the diversion of large flash floods from the large wadis. Diversion systems are much less common than runoff farms and are only found adjacent to the main wadis.⁹⁷

P. Mayerson has grouped the three types of systems distinguished by Evenari et al. into two categories: tributary-wadi cultivation and main-wadi cultivation. In tributary-wadi cultivation, which corresponds with Evenari et al.'s first two categories, stone terrace walls were built across minor wadis to check the free flow of water and prevent soil erosion.⁹⁸ The deposits of arable soil in the streambeds at the base of the slopes were cultivated, while the denuded slopes provided surface runoff. Since some of these terrace walls were recently built by Bedouin, Mayerson suggested that we can only be sure of ancient cultivation

94. Ibid., 97. Elliott, *The Elusa Oikoumene*, 24, noted that two properties of the Negev soils were exploited by ancient farmers for agriculture: the accumulation of water in wadi beds slightly beneath the ground's surface, and the creation of runoff when loess soils form crusts at the initial onset of rain. Devices such as terraces and dams took advantage of these natural properties.

95. Evenari et al., *The Negev*, 97.

96. Ibid., 99, 109–10.

97. Ibid., 110–11.

98. P. Mayerson, "The Ancient Agricultural Regime of Nessana and the Central Negev," in H. D. Colt (ed.), *Excavations at Nessana, Volume 1* (London: British School of Archaeology in Jerusalem, 1962) 212.

in those wadis where there are walls on the slopes of the adjacent hills in conjunction with those in the wadi bottoms, since Bedouin never build such walls and rarely repair them.⁹⁹ The walls on the slopes, which connect with the terrace walls in the wadi bottoms, are described by Mayerson as enclosure walls (corresponding with Evenari et al.'s conduits). According to Mayerson, enclosure walls that run down the slope and join with terrace walls marked the boundaries between the fields of different owners; otherwise, their main purpose was to prevent the debris and runoff from the tablelands and gullies directly above them from going into the fields.¹⁰⁰ Thus, Mayerson differs with Evenari et al., who interpreted these walls as conduits to catch surface runoff and channel it to the fields below. Mayerson's main-wadi cultivation corresponds with Evenari et al.'s third category. Here flood waters in major wadis were diverted from water-courses and directed into terraced basins on the silt banks above stream level.¹⁰¹

Agriculture in the Nessana Papyri

The Nessana papyri provide valuable information on agricultural crops and yields and on farming techniques in the Negev during the sixth and seventh centuries.¹⁰² The papyri were found in two rooms of the Church of Mary Mother of God and the Church of SS. Sergius and Bacchus at Nessana, where they were stored. They include literary documents (such as a copy of Virgil, a Latin-Greek glossary of the *Aeneid*, and manuscripts of the Gospel of John) and documents written during the last one hundred years of Byzantine rule over the Negev (in Greek) and during the first decades following the Muslim conquest (in Greek and Arabic). The nonliterary papyri consist of the archives of a military unit called the "Numerus of Very Loyal Theodosians,"¹⁰³ church archives of the early seventh century, the personal archives of George (son of Patrick), and a number of documents from the period immediately following the Muslim conquest.

The papyri indicate that there were three categories of owners of agricultural land at Nessana: the church, individual farmers, and *limitanei*. The church, which owned a great deal of land, continued to play a prominent role in the affairs of Nessana even after the Muslim conquest. The crops mentioned in the papyri include wheat, barley, and a leguminous plant called *arakos*, perhaps a variety of vetch. Figs, grapes, olives, dates, and almonds were also grown.¹⁰⁴

Most of the agricultural evidence has to be gleaned from various legal accounts, tax documents, and requisitions. One unique document details the exact amounts of wheat, barley, and *arakos* sown and reaped.¹⁰⁵ Other documents that shed light on agriculture at Nessana include divisions of property, a bill of sale, a notice to transfer taxes, a cession of land, accounts dealing with the disposition of wheat, food

99. Ibid., 232.

100. Ibid., 239–40.

101. Ibid., 212, 241–42.

102. For agriculture at Nessana, see *ibid.*; for the nonliterary papyri, see C. J. Kraemer, Jr., *Excavations at Nessana, Volume 3: Non-Literary Papyri* (Princeton: Princeton University Press, 1958).

103. According to Kraemer, this unit was based at Nessana. However, A. Negev and B. Isaac have each suggested that the unit was based in Rhinocorura; see B. Isaac, "The Army in the Late Roman East: The Persian Wars and the Defence of the Byzantine Provinces," *The Near East under Roman Rule: Selected Papers* (Leiden: Brill, 1998) 458 n. 92.

104. Mayerson, "The Ancient Agricultural Regime of Nessana," 225–31; Kraemer, *Excavations at Nessana*, 3.3–9; Evenari et al., *The Negev*, 121–22. The presence of pomegranate seeds in a room of the North Church complex suggests that pomegranates were grown as well (see Mayerson, "The Ancient Agricultural Regime of Nessana," 231).

105. P. Colt 82; see Mayerson, "The Ancient Agricultural Regime of Nessana," 224–25; Kraemer, *Excavations at Nessana*, 3.237–40.

tax, church offerings, receipts in kind, sales of dates, and requisitions of wheat and oil. Interestingly, none of the documents provides any evidence of animal husbandry, herds, or flocks. From the presence of the camel corps, however, we know that camels were bred locally.¹⁰⁶

The land at Nessana was held by free owners, with no evidence of land tenure, though there may have been tenant farmers. The sixth-century documents of the soldiers' archive indicate that both the military and civil populations owned land. Civilian farmers were free to exchange, cede, or sell their holdings providing that payment of taxes was guaranteed. There is also evidence for collective responsibility on the part of the landowners for the collection of land taxes and other administrative affairs relating to the land. This collective responsibility continued after the Muslim conquest, as indicated by requisitions from the governor at Gaza for wheat and oil addressed "to the people of Nessana." The land itself is classified as seed land, vineyard, and garden. Fields were given names or identified according to their location.¹⁰⁷

Although the Nessana papyri indicate that various crops were grown, they give the impression that wheat (*sitos*) was the most important cereal crop, since barley is mentioned in only two documents. The account of grain yield shows that five times as much wheat was sown as barley. As Mayerson pointed out, modern cultivation in the Negev is the opposite of that portrayed in the Nessana papyri, with barley accounting for about 80% of the total crop now sown. Today wheat is sown only in the west and north of the district, where the annual rainfall is approximately 200 mm. Mayerson was surprised to find that wheat predominated at Nessana, since barley is more drought resistant and gives better yields.¹⁰⁸ It is reasonable to assume that wheat was also the predominant cereal crop in the Yattir region during the Byzantine and early Islamic periods. Since grain yields in the neighborhood of Nessana are unexpectedly high for a region with less than 100 mm of rainfall, they could have been even higher in the Yattir region. Mayerson estimated that yields of seven- and eightfold for wheat and barley were the norm rather than the exception at Nessana. He also noted that modern Bedouin farmers cultivate all of the fruits mentioned in the Nessana papyri, though on a smaller scale.¹⁰⁹

Installations for Wine, Oil, and Cereal Production

Meshel et al. recorded wine presses at four sites in the northern half of the Yattir region.¹¹⁰ At least fourteen wine presses are located in the vicinity of Khirbet Yattir, and four olive presses are located within the site itself. Only one press is recorded in the southern part of the Yattir region (Map 139).¹¹¹ It is an olive-crushing stone, one meter in diameter, at Site 56 in the northwest part of the survey map. Olive and wine presses are conspicuously absent from the rest of the area of Map 139. This suggests that olives and grapes may have been cultivated only on the hills in the northern part of the Yattir region, while grains were grown on the loess plains to the south. On the other hand, the Nessana papyri, the industrial-sized wine presses at Shivta, Halutza (Elusa), and Avdat, and the local wine amphoras (the so-called "Gaza amphoras") distributed throughout the Mediterranean attest to the large-scale cultivation of grapes and olives in the Negev during the Byzantine period.¹¹² Smaller wine presses are recorded from some of the Negev

106. Mayerson, "The Ancient Agricultural Regime of Nessana," 225.

107. *Ibid.*, 225–26.

108. *Ibid.*, 227.

109. *Ibid.*, 227–28.

110. See Meshel et al., *The Yattir Region*, Sites 38, 66, 122, 228.

111. Govrin, *Map of Nahal Yattir*, 43*, Nahal Gez; see photo on p. 54.

112. See Mayerson, "The Ancient Agricultural Regime of Nessana," 227–31; *idem*, "The Wine and Vineyards of Gaza in the Byzantine Period," *Bulletin of the American Schools of Oriental Research* 257 (1985) 75–80; G. Mazor, "The Wine-Presses of the Negev," *Qadmoniot* 53–54 (1981) 51–60 (in Hebrew); B. L. Johnson and L. E. Stager,

highland farms.¹¹³ Interestingly, no olive or wine presses are published from Nessana, although the papyri indicate that the Nessana farmers raised grapes and olives.¹¹⁴ Thus, the absence of presses in the southern Yattir region does not necessarily mean that olives and grapes were not grown there. Perhaps, as the evidence from the Negev suggests, grapes and olives grown on rural farms were sold and exported raw, or were brought to the towns for processing in industrial-sized installations.

Some of the installations in the Yattir region that have been identified as olive presses were apparently mills for the production of cereal groats.¹¹⁵ Barley and glome wheat groats are a low standard substitute for wheat flour. Cereal groat mills lack certain features that are characteristic of Roman oil presses, and their barrel-shaped basin had a flat bottom that could not collect liquid. Their placement in the open air, where they are exposed to the autumn rains during the harvest season, makes them unsuitable for the production of olive oil. Many are located in semi-arid regions that are not suitable for olive growing. At least six cereal groat mills are found just to the north of 'Anim. They attest to the importance of cereal growing in the Yattir region throughout history.

"Ashkelon: Wine Emporium of the Holy Land," in S. Gitin (ed.), *Recent Excavations in Israel: A View to the West* (Dubuque, Ia.: Kendall/Hunt, 1995) 95–109; A. Negev, *The Architecture of Oboda: Final Report* (Qedem 36; Jerusalem: Hebrew University, 1997) 7–9.

113. Haiman, "Agriculture and Nomad-State Relations," 35; idem, "An Early Islamic Period Farm at Nahal Mitnan in the Negev Highlands," *'Atiqot* 26 (1995) 11; idem, *Archaeological Survey of Israel: Map of Har Hamran—Southwest (198) 10–00* (Jerusalem: Department of Antiquities and Museums, 1986) 40*, Site 18; 87*, Site 218; 96*, Site 253. If Haiman is correct that some of these farms were established during the Umayyad period, the production of wine might have continued after the Muslim conquest.

114. See Mayerson, "The Wine and Vineyards of Gaza," 77–78. Idem, "The Ancient Agricultural Regime of Nessana," 230, noted that the evidence for olive cultivation at Nessana comes entirely from papyri recording tax demands for oil. Based on these documents, Mayerson estimated a total annual production of about 2500 gallons.

115. D. Eitam, "Mass Production of Cereal Groats in Ancient Israel during the Roman and Byzantine Periods," in Y. Eshel (ed.), *Judea and Samaria Research Studies: Proceedings of the 6th Annual Meeting—1996* (Kedumim-Ariel: The Research Institute, The College of Judea and Samaria, 1997) 191–202 (in Hebrew with an English summary on p. xix).

CHAPTER 4

The Darom (South)

In Eusebius's *Onomasticon*, "Daroma" (the Aramaic form of *Darom*, which in Hebrew means 'south') refers to the area of the southern Hebron mountains, which was located in the southern part of the city territory of Eleutheropolis (Beth Guvrin). The term was still used by the late-tenth-century Arab geographer al-Muqaddasi to refer to part of the region of Beth Guvrin.¹ Unlike the rest of Judea, this area was inhabited by a sizable Jewish population after the end of the Bar Kokhba Revolt in 135. The Jewish population reached its peak following the revolt, when it was swelled by Jewish refugees from other parts of Judea. The Jewish settlements formed a belt of territory stretching from 'Ein Gedi on the shore of the Dead Sea to the east to the district of Gerar (Lachish) on the west, and from Dumah on the north to Iethira (Khirbet Yattir) on the south.²

Seven of the eleven Jewish villages listed by Eusebius in the *Onomasticon* are located in the *Darom*: Eremmon (Horvat Rimmon; Khirbet Umm er-Ramamin), western or greater Anaea (Horvat 'Anim; Khirbet Ghuwein et-Tahta or el-Gharbiyya), Eshtamo'a (es-Samu'), Jethan (Yutta), Thellah or Thalcha (Horvat Tillah; Kh. Khuweilfa), 'Ein Gedi, and Chermela/Chermoula (Carmel; Khirbet Kirmil). Eusebius describes all of these except Carmel as "large Jewish villages." Jewish remains have also been found at Khirbet Susiya, Horvat Ma'on (Khirbet Ma'in), and Horvat Kishor (Khirbet Umm el-Kashram).³ Two of the only three Christian villages mentioned by Eusebius in the entire country are also located in the *Darom*: eastern or lesser 'Anaea (Khirbet Ghuwein el-Fauqa or esh-Sharqiyya) and Iethira.⁴ This suggests that the area adopted Christianity early on, although some scholars have proposed that these were Judeo-Christian rather than Christian villages.⁵ However, from the fourth century on, the Christian population in the area

1. *Darom* could also denote Judea as a whole, or refer to the city of Lod and its vicinity; see J. Schwartz, *Jewish Settlement in Judaea after the Bar-Kochba War until the Arab Conquest* (Jerusalem: Magnes, 1986) 36 (in Hebrew). For the references to passages in Eusebius's *Onomasticon* not directly quoted here, see Schwartz, pp. 98–109. For the most recent and comprehensive discussion of the Darom, see D. Amit, *The Synagogues at Horvat Ma'on and Horvat 'Anim and the Jewish Settlement in Southern Judaea* (Jerusalem: Hebrew University, Ph.D. dissertation, 2002; in Hebrew). Because this work appeared after my book was in the proof stage, I could not incorporate much of the information it contains.

2. *Ibid.*, 36, 38, 41; M. Avi-Yonah, *The Holy Land from the Persian to the Arab Conquests (586 B.C. to A.D. 640): A Historical Geography* (Grand Rapids, Mich.: Baker, 1966) 161; *idem*, *The Jews of Palestine: A Political History from the Bar Kokhba War to the Arab Conquest* (Oxford: Blackwell, 1976) 16.

3. Schwartz, *Jewish Settlement in Judaea*, 98, 104.

4. Avi-Yonah, *The Jews of Palestine*, 139.

5. Schwartz, *Jewish Settlement in Judaea*, 107; Y. Barouch, "Tell Ziph and the Establishment of Christianity in the South of Hebron Mountain [*sic*]," in Y. Eshel (ed.), *Judea and Samaria Research Studies: Proceedings of the Eighth Annual Meeting, 1998* (Kedumim-Ariel: The Research Institute, The College of Judea and Samaria, 1999) 180 (in Hebrew).

undoubtedly increased, as attested by the numerous Byzantine churches at various sites.⁶

The historical and archaeological evidence thus indicates that there was a sizable Jewish population in the *Darom* during the second to fourth centuries, though Christianity was adopted by some inhabitants at an early date. During the course of the Byzantine period (fourth to seventh centuries), many of the villages became Christian, while others remained Jewish. The presence of Jewish and Christian populations can sometimes be discerned in the archaeological record. This chapter reviews the archaeological evidence from the better-investigated (that is, excavated and published) sites. The evidence for the other sites may be summarized as follows: Ziph had a Jewish population until at least the fourth century but became Christian during the course of the Byzantine period.⁷ Dumah and 'Anab may also have originally been Jewish villages. Since there is no indication that Eremmon (see discussion below) became Christian, it may have remained Jewish through the Byzantine period. The relationship between Eremmon and nearby Khirbet Abu Hof, where two Byzantine churches have been discovered, is unclear.⁸ Jethan (Yutta) is described by Eusebius as "a very large Jewish village,"⁹ while Kfar 'Aziz (Kh. al-'Uzez) was the residence of Rabbi Ishmael in the late first to early second century C.E. Both were Jewish villages until the fourth century and either became Christian or had mixed Jewish and Christian populations during the Byzantine period.¹⁰ The

6. Schwartz, *Jewish Settlement in Judaea*, 107, lists Byzantine churches at the following sites: Dura'; e-Deir; 'Ain e-Taka; Dumah; Umm el-Amud; Kh. Tawas; Deir el-'Asal; Kh. Bism; Guf; Kh. Beit 'Amra'; Aristobulia; Hurshah; Kh. 'Anim; Kfar Baruch; Kh. Majdal Ba'; 'Anab; Kritin; Kh. Abu Hof; Kfar 'Aziz; Kh. e-Darat; Kh. Zanuta'. He describes the following sites as having a "Christian character": Kh. Beit 'Awa'; Kh. el-Muraq; Kh. Refet; Krazah; Ziph.

7. *Ibid.*, 105, 109. Ziph was the capital of the district south of Hebron in the period between the First Jewish Revolt against the Romans and the Bar Kokhba Revolt (70–132 C.E.). The villages of Aristobulia (which was apparently established during the Hasmonean period) and Yakim were located in the district of Ziph. The population of both villages and the town of Ziph was Jewish during the period between the two revolts, as indicated by an inscription on an ossuary from Ziph and by two documents found in a cave in Wadi Saiyal (Nahal Ze'elim); see D. Amit and H. Eshel, "The Bar Kokhba Revolt in the Southern Hebron Mountains," *Eretz-Israel* 25 (Aviram Volume; 1996) 463–70 (in Hebrew). Although the population apparently remained Jewish at least until the fourth century, the remains of churches and other evidence indicate that Ziph and Aristobulia became Christian during the course of the Byzantine period; see Barouch, "Tell Zif and the Establishment of Christianity," 171–77; Y. Hirschfeld, "Khirbet el-Quneitra: A Byzantine Monastery in the Wilderness of Ziph," *Eretz-Israel* 18 (Avigad Volume; 1985) 243–55 (in Hebrew); D. Amit, "Kh. Umm Halasa: An Additional Monastery in the Wilderness of Ziph," in Y. Eshel (ed.), *Judea and Samaria Research Studies: Proceedings of the Sixth Annual Meeting, 1996* (Kedumim-Ariel: The Research Institute, the College of Judea and Samaria, 1997) 259–70 (in Hebrew).

8. Schwartz, *Jewish Settlement in Judaea*, 109 n. 130. The churches at Khirbet Abu Hof that were uncovered in excavations conducted by D. Alon of the Israel Antiquities Authority are still unpublished.

9. The architectural fragments carved with Christian symbols built into Arab houses at Yatta were apparently brought there from nearby Kh. Carmel; see Schwartz, *Jewish Settlement in Judaea*, 109 n. 131; F.-M. Abel and A. Barrois, "Chronique, Yatta," *Revue Biblique* 38 (1929) 583–85.

10. According to Schwartz (*ibid.*), these Jewish villages became Christian during the Byzantine period; also see Y. Tsafir, L. Di Segni, and J. Green, *Tabula Imperii Romani Iudaea Palaestina: Eretz Israel in the Hellenistic, Roman and Byzantine Periods, Maps and Gazetteer* (Jerusalem: Israel Academy of Sciences and Humanities, 1994) 162, s.v. "Kefar 'Aziz." Mader identified the remains of a large public building at Kfar 'Aziz as possibly representing a synagogue; see E. Mader, *Mambre* (Freiburg im Breisgau: Erich Wewel, 1957) 213–18. However, as Hüttenmeister and Reeg have noted, the building's east–west orientation, and the presence of crosses at the site, combined with the absence of Jewish symbols, indicate that it must be a church; see F. Hüttenmeister and G. Reeg, *Die antiken synagogen in Israel* (Wiesbaden: Reichert, 1977) 255–56. Schwartz reports having seen a baptismal font at the site, which is no longer visible (Schwartz, *Jewish Settlement in Judaea*, 104 n. 81). For the suggestion that Yutta and Kfar 'Aziz had mixed Jewish and Christian populations during the Byzantine period, see Barouch, "Tell Zif and the Establishment of Christianity," 180. According to Amit, *The Synagogues of Horvat Ma'on and Horvat 'Anim*, there is no evidence for Jewish presence at Kfar 'Aziz after the Bar Kokhba Revolt.

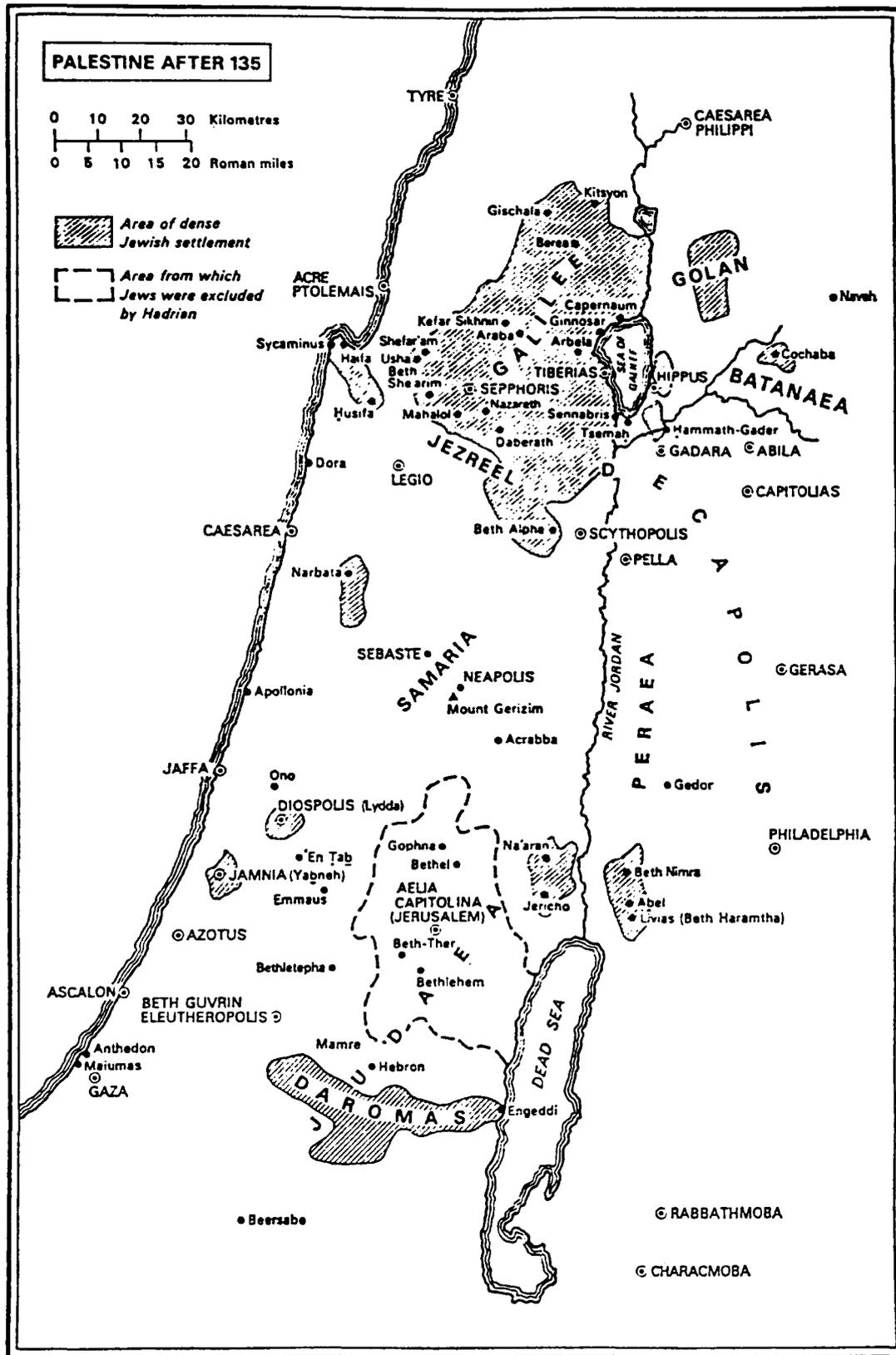


Fig. 5. Map of Roman Palestine showing the location of the Darom. From M. Avi-Yonah, *The Jews under Roman and Byzantine Rule* (Jerusalem: Magnes, 1984) 17.

paucity of Christian remains to the north of Horvat Tillah and Horvat Rimmon, in the area of Horvat Kishor and Khirbet Gomer suggests that this area may have remained Jewish.¹¹

There are four Byzantine churches but no clearly Jewish remains at Carmel, which Eusebius mentions as one of the Jewish villages of the *Darom*. In Eusebius's time, the site was garrisoned by the *Equites Scutarii Illyriciani*, a position it held throughout the Byzantine period. The ancient name of the nearby Jewish site of Khirbet Susiya is unknown.¹² The historical and archaeological evidence suggests that, following the Bar Kokhba revolt, Carmel was a Jewish village. During the course of the Byzantine period, however, the Jewish population apparently either converted to Christianity or left. The same process can be seen in the Ahinoam Cave Cemetery at Beth Guvrin (see below).

Horvat Kishor and Horvat Tillah are located in the southern Judean lowlands (Shephela), near Eremmon. The presence of a Jewish population at the former during the fourth to fifth centuries is indicated by the discovery of a stone lintel with a menorah carved in relief.¹³ The cemetery at Horvat Tillah, one of the large Jewish villages mentioned by Eusebius, also provides evidence for the presence of a Jewish population through the third and fourth centuries.¹⁴ It is not clear, however, whether these two villages remained Jewish through the Byzantine period.

The following discussion presents the archaeological evidence for Jewish, Christian, and Muslim presence at these excavated sites in the *Darom*: Horvat Ma'on, Horvat Rimmon, Horvat Susiya, Eshtamo'a, Horvat 'Anim, Beth Guvrin, and Beth Loya. I also include an analysis of the remains at Horvat Berachot, near Bethlehem.

Horvat Ma'on

Maon, in tribu Juda, conta solis ortum Daromae.¹⁵

Horvat Ma'on¹⁶ (Khirbet Ma'in) is located in the southeastern Hebron mountains,¹⁷ 1.25 km south of Carmel and about 3 km east of Horvat Susiya. The site sits atop a hill that rises 863 m above sea level. The

11. Schwartz, *Jewish Settlement in Judaea*, 109; A. Kloner, "New Jewish Inscriptions from the 'Darom,'" *Qadmoniot* 71–72 (1985) 96–100 (in Hebrew).

12. *ND Or*. XXXIV.20. For A. Negev's suggestion that there were two sites called Chermela in Eusebius's time, see the discussion of Horvat Susiya below. Amit, *The Synagogues at Horvat Ma'on and Horvat 'Anim*, believes that, at the time of Eusebius, Jewish Carmel was located on the north slope of the tel of Ma'on.

13. See A. Kloner, "Kishor, Horvat," in Stern (ed.), *NEAEHL*, 875; idem, "A Lintel with Menorah Relief from Horvat Kishor," in L. I. Levine (ed.), *Ancient Synagogues Revealed* (Jerusalem: Israel Exploration Society, 1981) 160–61.

14. See A. Kloner, "Tillah, Horvat," in Stern (ed.), *NEAEHL*, 1474; idem, "The Cemetery at Horvat Thala," *Eretz-Israel* 17 (Brawer Volume; 1984) 325–32 (in Hebrew).

15. *Editio* F. Larsow and G. Parthey (eds.), *Eusebii Pamphili Episcopi Caesariensis Onomasticon* (Paris: Bero- lini, 1862) 277, lines 12–13. All of the quotations cited here from Eusebius's *Onomasticon* are from this edition.

16. For the excavations at Ma'on, see: Amit, *The Synagogues at Horvat Ma'on and Horvat 'Anim*; Z. Ilan and D. Amit, "Maon (in Judea)," in Stern (ed.), *NEAEHL*, 942–44; D. Amit and Z. Ilan, "The Synagogue at Ma'on in Judea," *Qadmoniot* 23 (1990) 115–25 (in Hebrew); Z. Ilan and D. Amit, "Horvat Ma'on, Synagogue," *Excavations and Surveys in Israel* 7–8 (1988–89) 123–25; D. Amit, "Architectural Plans of Synagogues in the Southern Judean Hills and the 'Halakah,'" in D. Urman and P. V. M. Flesher (eds.), *Ancient Synagogues: Historical Analysis and Archaeological Discovery* (Leiden: Brill, 1995) 1.129–56. I have prepared the publication of the pottery from the excavations of Amit and Ilan (forthcoming).

17. I have translated the Hebrew term *har hebrôn* literally as 'Mount Hebron' or 'Hebron mountains' instead of 'Hebron hills', as it is sometimes rendered.

Roman road from Hebron to Malhata (Malatha) to Mamphis passes by the western foot of the hill. A small Arab village called Khirbet Maʿin is located on the northwest slope. Eusebius refers to Maʿon as a settlement in the eastern part of the *Darom* and noted that it lay in ruins at his time (early fourth century). The site was surveyed in 1968 by M. Kochavi, and in 1979 by Y. Hirschfeld, who focused on the Byzantine fort on the summit.¹⁸ Excavations were conducted in 1987–88 by Z. Ilan and D. Amit. Wine and olive presses found on and around the west slope of the hill attest to the production of wine and olive oil during the Roman and Byzantine periods. The excavations concentrated on the remains of an ancient synagogue, with evidence of two occupational phases. The ceramic and numismatic evidence points to a fourth/fifth–seventh-century date for the construction and occupation of the synagogue. Of the three coins recovered in the excavation, one is a coin of Valentinian I (364–75), and the other two are numii of the fifth century. The absence of any ceramic types that postdate the late seventh to early eighth centuries indicates that the synagogue, and probably the rest of the site, were abandoned at about that time.

Horvat Rimmon (Eremmon)

Eremmon, vicus Judaeorum praegrans in sexto decimo ab Eleutheropoli millario contra meridiem in Daroma.¹⁹

Horvat Rimmon (Khirbet Umm er-Ramamin) is located on a hill in the southern Hebron lowlands, about one km south of Tel Halif and 26 km south of Eleutheropolis (Beth Guvrin). This “very large Jewish village,” as Eusebius describes it, covers an area of about 100 dunams. A series of large public buildings, built one over the other on the summit of the hill was excavated between 1978 and 1980 by A. Kloner.²⁰ The earliest public building on the summit, which dates to the third century, might have been a synagogue. The next building above, which was erected in the second half of the fourth century, was certainly a synagogue. It was surrounded by rooms on all sides and enclosed by a wall. In a crack between two stones in the western wall of a long, narrow room on the western side of the building, a hoard of 64 bronze coins of the third to early fifth centuries was found. Another 160 bronze coins of the third to fifth centuries were scattered on the floor of the room and in the ashy fill above it. Kloner noted that most of these coins were concentrated in the southern part of the room (L64), which seems to have been intentionally filled with ashy earth and large stones to a depth of 80 cm. This fill contained many objects, including sections of a candelabrum, pieces of lamp holders, a complete bronze lamp, a gold pendant, glass and stone beads, and bone and ivory objects. In the upper part of the fill, two pottery vessels covered by a stone were found buried upside down about one meter away from each other. Each contained a hoard of gold coins, one with 35 coins and the other with 12. One of the groups of coins had been wrapped in cloth before being deposited. The manner in which the coins were buried suggests that they had been deliberately hidden. They range in date from the reign of Valentine I (364–375) to Anastasius I (491–518).²¹ The finds from this room

18. See Y. Hirschfeld, “A Line of Byzantine Forts along the Eastern Highway of the Hebron Hills,” *Qadmoniot* 12 (1979) 82 (in Hebrew).

19. Larsow and Parthey, *Eusebii*, 191, lines 4–6.

20. Only preliminary reports have been published to date; see A. Kloner, “Hurvāt Rimmon, 1979,” *Israel Exploration Journal* 30 (1980) 226–28; idem, “Hurvāt Rimmon, 1980,” *Israel Exploration Journal* 31 (1981) 241–42; idem, “Rimmon, Horvat,” in Stern (ed.), *NEAEHL*, 1284–85; idem, “The Synagogues of Horvat Rimmon,” in R. Hachlili (ed.), *Ancient Synagogues in Israel, Third–Seventh Century C.E.* (BAR International Series 499; Oxford: BAR, 1989) 43–47.

21. Idem, “Hurvāt Rimmon, 1979,” 227; idem, “The Synagogues of Horvat Rimmon,” 44–46; idem, “Rimmon, Horvat.”

indicate that the synagogue suffered a destruction by fire, apparently by human agency, some time around the late fifth to early sixth century. It is impossible to determine the precise sequence of events based on the preliminary reports. Although the coins in both hoards are largely contemporary, the fact that they were separated by an 80-cm-deep layer of ashy fill suggests that they were deposited at different times and under different circumstances. Kloner noted that the bronze hoard seems to be a hidden “cache” that was added to from time to time.²² It therefore appears to represent a savings hoard rather than an emergency hoard. This evidence suggests that in the late fifth to early sixth century or later, the synagogue was destroyed by fire, probably deliberately caused by human agents (which would account for what appears to be its subsequent abandonment). Some time after the fire, the inhabitants cleared out the rest of the rooms of the synagogue and piled the debris in L64. Perhaps at this time the hoard of gold coins was buried in the top layer of this fill, as a security precaution against similar future destructions. If this is the case, the gold hoard should be associated with the next phase in the life of the synagogue. Although the gold hoard may have been buried before the site was destroyed by fire, this would make it difficult to account for the layer of ashy debris, which seems to have been deliberately deposited in this room as a part of clean-up operations following a destruction.

Kloner nowhere discusses the circumstances regarding the burial of these hoards or the presence of the burned layer. However, they create a problem with his proposed chronology, according to which the next (and last) synagogue on the spot was built in the early seventh century. If the bronze coins in the savings hoard and on the floor of L64 provide a *terminus post quem* for the synagogue’s destruction, and the gold hoard provides a *terminus ante quem*, then the fire could not have occurred before the late fifth to early sixth century. Assigning the fire to the late fifth to early sixth century would create an occupational gap of nearly 100 years between this phase and the next (last) phase. However, Kloner does not describe evidence for such a prolonged abandonment of the synagogue. The other possibility is that the bronze coins substantially antedate the destruction; that is, that the fire occurred shortly before the last synagogue was constructed in the early seventh century. This seems less likely because it would mean that the hoard of gold coins of the fourth to late fifth centuries was not deposited until the seventh century. One might also expect the inhabitants cleaning up the site immediately after its destruction to have salvaged more of the precious (that is, metal) objects in the debris in L64. The fragmentary state of the objects and the manner in which the debris was deposited in the room suggest that this represents a cleaning-up of the site after a prolonged abandonment.

The last synagogue erected on this spot reused the walls of its predecessor but was paved with a new floor of rectangular stone slabs. Trenches dug into the grey mortar beneath the pavement yielded coins dating to the reigns of Justinian I (527–565), Tiberius Constantinus (578–582), and Phocas (602–610). These coins thus provide an early-seventh-century *terminus post quem* for the construction of the last synagogue. According to Kloner, the building continued in use at least until the Muslim conquest and probably for some time thereafter.²³ The fact that no pottery has been published from this excavation makes it impossible to evaluate the accuracy of his proposed chronology. Kloner was unable to determine whether a few installations such as benches or partitions found on the floor date to the last phase of the synagogue’s use or to the period following its abandonment.²⁴

Remains associated with the final phase of the synagogue’s occupation were found in all of the areas around it. A beaten earth floor and an oven (*tabun*) were uncovered in the room to the west (the room with the earlier coin hoards and fill). A coin of Heraclius (610–641) was found under this floor. Another oven

22. Idem, “The Synagogues of Horvat Rimmon,” 45.

23. Idem, “Hurvav Rimmon, 1980,” 242; idem, “The Synagogues of Horvat Rimmon,” 46; idem, “Rimmon, Horvat,” 1285.

24. Idem, “Rimmon, Horvat,” 1285.

was found in the corner room of the enclosure, to the north of the synagogue. Two more ovens, one above the other, were discovered to the east, together with a large number of pottery vessels and goblet-shaped glass oil lamps. Sherds inscribed with an Aramaic incantation were found in the fill associated with the lower (earlier) oven.²⁵ The domestic nature of the installations associated with the final phase of occupation raises the question of whether the building still functioned as a synagogue at this time.

The published evidence suggests that the late-fourth-century synagogue at Horvat Rimmon was destroyed by a fire in the late fifth or early sixth century. It apparently lay in ruins until it was cleared and reconstructed in the early seventh century. Occupation continued even after the Muslim conquest, although it is not clear whether the building still functioned as a synagogue during its final phase of existence.

Horvat (or Khirbet) Susiya

Horvat Susiya is located in the southeastern part of the Hebron mountains, about 3 kilometers east of the village of Eshtamo'a (es-Samu'). The site's modern Arabic name, Khirbet Susiya, provides no clue about its identity. Negev has suggested that Khirbet Susiya is a new name and that the site should be identified with southern Carmel, or Khirbet Kirmil, about 2 km northeast of Khirbet Susiya. In Eusebius's time, Carmel was the seat of a military guard, a position it held throughout the Byzantine period. Three churches have been discovered at Khirbet Kirmil. In a separate entry Eusebius mentions a Jewish village by the name of Karmelos, which he connects with the biblical narratives. Negev has suggested that in Eusebius's time two sites were called Carmel (one of which was changed in later sources to Chermoula); one was a pagan Roman and later a Christian town, and the other was the Carmel of the Jews.²⁶ As Schwartz has pointed out, however, there is no indication that Eusebius was referring to two different sites with the same name, while Z. Safrai has demonstrated that place-names are often repeated in different passages of the *Onomasticon*.²⁷

The site of Horvat Susiya consists of a horseshoe-shaped hill with its rounded end to the south and the open ends facing north. Whereas the houses, courtyards, and caves occupy the crest of the hill and the western slope, the entire length of the eastern slope of the hill is occupied by burial caves. The synagogue is located on the southeastern slope of a hill to the west of the site. Part of the valley between the two arms of the hill is terraced by ancient terrace walls, forming part of the agricultural hinterland of the site. Similar terraced plots surround the site on all sides. Another cemetery of rock-cut caves, which is apparently later in date than the eastern cemetery, is located on the eastern slope of the hill just south of Horvat Susiya. Higher up on the same hill are cisterns and wine and olive presses. Similar installations may also be seen on the hills surrounding the town for some 2–3 km, where they adjoin the territories of Khirbet Kirmil to the northeast, Yatta to the north, and es-Samu' to the southwest.²⁸

25. Ibid.; idem, "The Synagogues of Horvat Rimmon," 46–47; idem, "Horvat Rimmon, 1979," 227; idem, "Horvat Rimmon, 1980," 242.

26. A. Negev, "Susiya, Khirbet," in Stern (ed.), *NEAEHL*, 1415–16; idem, "Carmel in Daroma," *Eretz-Israel* 18 (Avigad Volume; 1985) 331–34 (in Hebrew).

27. J. Schwartz, "The Jews of the Southern Hebron Mountains in the Period of the Mishnah and Talmud: Historical Background," in A. Pniel (ed.), *Susiya, the Ancient Jewish City: A Collection of Articles* (Susiya: The Center for Tours and Study, 1990) 11 (in Hebrew); Z. Safrai, "The *Onomasticon* of Eusebius and the Jewish Population of the Southern Hebron Hills," *Cathedra* 72 (1994) 23–33 (in Hebrew). According to Amit, *The Synagogues at Horvat Ma'on and Horvat 'Anim*, 38–48, Susiya is the ancient name of the site, because it is attested in a Crusader-period document.

28. A. Negev, "Excavations at Carmel (Kh. Susiya) in 1984: Preliminary Report," *Israel Exploration Journal* 35 (1985) 232.

Several expeditions have carried out excavations in different parts of the village at Horvat Susiya. The synagogue was excavated between 1969 and 1972 by S. Gutman, Z. Yeivin, and E. Netzer; a private dwelling with shops located on the western hill was excavated by Y. Hirschfeld in 1978; in 1984–85 A. Negev excavated dwelling caves, a tower, and a defensive building in the eastern part of the town, and from 1985 to 1987, Z. Yeivin excavated in the same part of the town.²⁹ Unfortunately, none of these expeditions has produced a final excavation report, and only Hirschfeld has illustrated some of the pottery he found.³⁰ Nevertheless, the preliminary publications make it clear that there is evidence for substantial early Islamic occupation at Horvat Susiya. Most of this evidence comes from the area of the synagogue and from Hirschfeld's excavations.

*The Synagogue.*³¹ After its initial construction, apparently in the fourth or fifth century, the synagogue continued to be used, though undergoing numerous repairs and modifications, for at least 200 years. It is not clear exactly how long the building continued to function as a synagogue. There is no evidence for destruction or disturbance at the time of the Muslim conquest. However, at some point a mosque was installed in the synagogue's courtyard, which included a plastered mihrab in the southern wall, and another one built between two columns of the southern portico. Crude stone benches were built to the north on the stone pavement of the courtyard.³² Gutman, Yeivin, and Netzer dated the construction of the mosque as follows:

Within the courtyard, near the northern wall, a series of caves was revealed, sealed either prior to or at the time of the construction of the mosque there. These caves contained no remains from a time later than the ninth century C.E., and thus we can assume that they subsequently remained closed. The mosque and the area of the synagogue, in contrast, were strewn with remains from the tenth–fifteenth centuries C.E. Thus, the mosque was probably built in the tenth century C.E., at the earliest, after the synagogue had fallen into ruin.³³

According to the excavators' preliminary report, the mosque must postdate the ninth century. However, the fact that none of the pottery is illustrated makes it impossible to evaluate the accuracy of their chronology. Elsewhere, Yeivin has published a significantly different chronology for the mosque:

After the fourth phase, the building ceased to be used as a synagogue. The prayer hall and its installations were destroyed. A mosque was erected in the southern half of the courtyard and benches were built in its northern part. The entrance to the mosque was in the building's northern wall, and the mihrab was in the southern wall. A large number of Arabic inscriptions were found on plaster fragments that had fallen from the mosque's walls. . . . The many repairs attest to the prolonged use of the synagogue, which was probably founded in the late third or early fourth century C.E.³⁴ The building was used as a synagogue until the eighth or ninth century, when it was abandoned, destroyed, and replaced by a mosque. An Arabic inscription writ-

29. Ibid.; A. Negev, "Susiya, Khirbet," 1416; Z. Yeivin, "Susiya, Khirbet: The Synagogue," in Stern (ed.), *NEAEHL*, 1417–21; S. Gutman, Z. Yeivin, and E. Netzer, "Excavations in the Synagogue at Horvat Susiya," in Levine, *Ancient Synagogues Revealed*, 123–28; Y. Hirschfeld, "Excavation of a Jewish Dwelling at Khirbet Susiya," *Eretz-Israel* 17 (Brawer Volume; 1984) 168–80 (in Hebrew); Z. Yeivin, "Sussia: A Jewish Town from the Talmudic Period," in Z. H. Erlich and Y. Eshel (eds.), *Judea and Samaria Research Studies: Proceedings of the 3rd Annual Meeting—1993* (Kedumim-Ariel: The Research Institute, The College of Judea and Samaria, 1994) 191–96 (in Hebrew); Pniel, *Susiya*. I would like to thank Yuval Barouch for giving me a tour of his excavations at the site in June 1999.

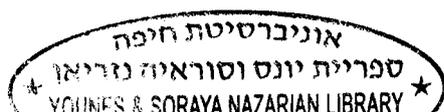
30. Hirschfeld, "Excavation of a Jewish Dwelling," 169, 174, 175.

31. For the most detailed accounts of the synagogue, see Gutman et al., "Excavations in the Synagogue at Horvat Susiya"; Yeivin, "Susiya, Khirbet: The Synagogue."

32. Gutman et al., "Excavations in the Synagogue at Horvat Susiya," 124.

33. Ibid., 128.

34. According to Gutman et al. (ibid.), the synagogue was constructed in the late fourth to fifth century.



ten in ink on a plaster fragment from the mosque testifies to the mosque's existence in the "year 193" of the Hejira (814–815).³⁵

These two accounts differ on significant points. According to one, the mosque was built no earlier than the tenth century, after the synagogue had fallen into ruin. The other states that the mosque existed by the early ninth century, and it refers to the destruction of the synagogue. Is it in fact possible to determine when the synagogue went out of use and was replaced by the mosque? The excavators distinguished more than five phases in repairs to the mosaics of the synagogue, as well as numerous architectural modifications. They divided these into four phases; as mentioned above, after the fourth phase the building ceased to be used as a synagogue. In the fourth phase, the prayer hall was divided into two unequal parts by a wall that destroyed part of the main bema and part of the mosaic pavement, and retaining walls were added to some of the outer walls.³⁶ It is not clear why the excavators assumed that the building was still in use as a synagogue at this time. Beneath the benches in the southern part of the prayer hall, which were cut through by the foundation trench of the later partition wall, a coin of Justinian I was discovered.³⁷ This indicates that the partition wall, and with it phase four, date to the sixth century or later. The Arabic inscription indicates that the mosque was in existence by the beginning of the ninth century. Thus, the presently available evidence suggests that some time during the course of the seventh to eighth centuries the synagogue was abandoned and the mosque was built. It is impossible on the basis of the published evidence to determine whether the synagogue was already abandoned when the mosque was installed. The fact that there are no references to signs of burning suggests that it did not suffer a deliberate destruction; instead, the parts of the building (in particular, the prayer hall) that were not occupied by the mosque seem to have been neglected and possibly deliberately dismantled for their architectural parts. The presence of the inscription dated to the early ninth century, combined with the fact that concave mihrabs were apparently not a feature of mosque design before the time of the caliph al-Walid I (A.H. 86–96/705–15 C.E.),³⁸ make it possible to pinpoint the construction date of the mosque at Khirbet Susiya to the eighth century. This chronology is complemented by the picture obtained from the dwelling and shop complex excavated by Hirschfeld.³⁹

Hirschfeld's complex is located on the southern edge of the western hill of the site. It consists of a building constructed of ashlar masonry, with an enclosed courtyard on the east. The building was divided by an east–west wall into two virtually identical units. Each of these two units, the northern one and southern one, was further subdivided by interior partition walls into eastern and western parts. The building was roofed with wooden branches, and mud was laid over stone arches that were carried on pilasters projecting from the walls of the rooms. According to Hirschfeld, this complex was occupied by a single family, with the two western parts of each unit having served as shops opening onto an alley. Hirschfeld believes that the occupants of the house were Jewish and suggested that a diagonal groove in one of the doorposts held a mezzuzah.⁴⁰ The western rooms of each unit were used for dwelling purposes; the southeastern room was identified by Hirschfeld as a triclinium, or reception room.⁴¹ The courtyard, which was surrounded by a crudely built wall, contained an oven, a sheep-pen, and a trough. On the basis of the ceramic and numismatic evidence, Hirschfeld dated the construction of this complex to the sixth century and its abandonment

35. Yeivin, "Susiya, Khirbet: The Synagogue," 1420–21. The inscription, which is incised and not written on plaster, is dated by M. Sharon to 808–809 C.E.; see Amit, *The Synagogues at Horvat Ma'on and Horvat 'Anim*, 68–82.

36. *Ibid.*, 1420.

37. Gutman et al., "Excavations in the Synagogue at Horvat Susiya," 128.

38. Schick, *The Christian Communities of Palestine*, 142.

39. Hirschfeld, "Excavation of a Jewish Dwelling."

40. *Ibid.*, 192.

41. *Ibid.*, 172–73.

to the late eighth century, at the latest.⁴² However, the pottery he illustrated from a sounding beneath the floors of the house provides a late-sixth- to seventh-century terminus post quem for its construction. The types represented include storage jars of the late sixth to early eighth centuries, and a cooking pot dated from the fifth or sixth century to the late seventh or early eighth century.⁴³ Hirschfeld referred to the pottery found above the floors as Umayyad and dated the abandonment of the complex to no later than the end of the eighth century. The illustrated pottery found on top of the floors of the house and in the courtyard includes “Mefjer” (buff) ware (fig. 6), early Islamic channel-nozzle lamps with a high tongue handle (figs. 8; 9:7), storage jars with a swollen neck (fig. 9:3), and a type of bowl of early Islamic date (fig. 7:2).⁴⁴ Some earlier types are also represented among the debris from the courtyard, including a bowl and an oil lamp of mid-sixth- to seventh-century date (fig. 9:1, 4), and oil lamps of seventh- to early-eighth-century date (fig. 9:5–6).⁴⁵ Hirschfeld noted the complete absence of glazed pottery.⁴⁶ A coin of Mauricius (582–602) was found in a crack between the paving stones of the southern “shop.”⁴⁷ Hirschfeld also referred to some sort of post-abandonment “squatter” occupation, represented by poorly constructed partition walls and tether holes for animals cut into some of the pilaster capitals.⁴⁸

The pottery from the sounding under the floor of the house points to a construction date no earlier than the seventh century. The latest types represented on top of the floors, such as the “Mefjer” ware, the FBW bowl, the channel-nozzle lamps with high tongue handle, and storage jars with swollen neck, all have ranges from the eighth to ninth or tenth centuries. These suggest that the complex was abandoned in the ninth or tenth century. The absence of glazed ware is not surprising at a remote village site, especially since Islamic glazed ware probably remained uncommon for some time after its appearance in Palestine in the early ninth century. Thus, this complex may have been constructed at about the same time that the mosque was established, and its occupation appears to be contemporary with the use of the mosque. It is therefore questionable, if not unlikely, that its inhabitants were Jewish. Though it is possible that Jews continued to occupy the site after the construction of the mosque, the archaeological evidence does not provide any indication of their presence after the seventh century at the latest. According to Yeivin, the fact that most of the pottery recovered in his excavations dates to the “early Islamic period” indicates that this is when the settlement reached the height of its prosperity.⁴⁹

Eshtamo‘a

Esthemo, civitas sacerdotalis, nunc autem ostenditur praegrandis vicus Judaeorum in Daroma, qui locus ad Eleutheropoleos pertinet regionem.⁵⁰

42. *Ibid.*, 168–69, 176.

43. *Ibid.*, 169, fig. 2:2 (cooking pot), 3–4 (storage jars). See Magness, *JCC*, 219–20, Cooking Pots Form 4C; 226, Storage Jars Form 5A.

44. For “Mefjer” ware, see Avissar, “The Medieval Pottery,” 158–59, Type 6, dated Abbasid and later; also see J. Magness, “The Chronology of Capernaum in the Early Islamic Period,” *Journal of the American Oriental Society* 117 (1997) 484. For channel-nozzle oil lamps with a high tongue handle, see *idem*, *JCC*, 258, Oil Lamps Form 5, dated 8c–10c. For storage jars with a swollen neck, see *ibid.*, 230–31, Storage Jars Form 7, dated late 7c to 9c/10c. For the early Islamic bowl, see *ibid.*, 198–99, FBW Bowls Form 2A, dated mid-7c to 9c/10c.

45. For the bowl see Magness, *JCC*, 193–95, FBW Bowls Form 1B; for the oil lamps, see *ibid.*, 251–52, Oil Lamps Form 3A; 255–57, Oil Lamps Form 4B.

46. Hirschfeld, “Excavation of a Jewish Dwelling,” 169, 174.

47. *Ibid.*, 168.

48. *Ibid.*, 170.

49. Yeivin, “Sussia,” 196.

50. Larsow and Parthey, *Eusebii*, 193, lines 7–10.

Eshtamo'a has been identified with the Arab village of es-Samu' in the southern Hebron mountains, about 14 km south of Hebron. It is one of the "very large Jewish villages" mentioned by Eusebius. Excavations in the ancient synagogue at the site were carried out in 1935–36 by L. A. Mayer and A. Reifenberg and again in 1969–70 under the direction of Z. Yeivin.⁵¹

None of the preliminary reports provides an explicit absolute chronology for the synagogue. Mayer and Reifenberg implied that it dates to the fourth century, based on Eusebius's reference to a "very large Jewish village" at the site at that time, which must, they assumed, have had a synagogue.⁵² Yeivin mentioned only that "the latest finds [from the synagogue area] are from the fourth to fifth centuries C.E."⁵³ The fact that no pottery or coins are published from either excavation makes it impossible to clarify the chronology any further. While parallels with other synagogues in the region and Eusebius's reference to a Jewish village at the site make it reasonable to assume that the synagogue existed by the late fourth century, evidence for repairs to the building suggest it remained in use for some time thereafter.⁵⁴ Mayer and Reifenberg noted that, "some time later a thorough restoration of the floor took place, and 48.5 cm above the original floor, another floor was laid of which slightly more is left than of the previous one."⁵⁵ This later floor was apparently made of large white tesserae.⁵⁶

The two stone benches along the southern wall of the synagogue were cut by the mihrab of a mosque. The position of its face 365 cm in front of the southern wall was taken by Mayer and Reifenberg as a possible indication that the synagogue was already in ruins when the mosque was established. On the basis of the "quality of the stones" and the "stilted shape" of the mihrab, they dated the construction of the mosque to the Umayyad period.⁵⁷ In his earlier report, Yeivin noted that according to a local tradition, the mosque was established in the time of Saladin.⁵⁸ Later he stated that the mihrab was "probably built in the tenth century, when the building served as a mosque."⁵⁹ The fact that concave mihrabs were not introduced until the time of al-Walid I (86–96/705–715) provides an early-eighth-century terminus post quem for the mosque.⁶⁰

It is therefore impossible to establish when the mosque was installed in the synagogue on the basis of the presently available evidence. It is also not clear whether the synagogue had already been abandoned when the mosque was built. Eshtamo'a's physical proximity to Horvat Susiya and the similarity of their synagogues suggests that they may have a similar history, in which case mosques may have been established in both buildings in the eighth century.

Horvat 'Anim

[E]st et alia grandis villa Judaeorum nomine Anea in Daroma, contra australem plagam Chebronis, novem ab ea millibus separata.⁶¹

51. See L. A. Mayer and A. Reifenberg, "The Synagogue of Eshtemo'a: Preliminary Report," *Journal of the Palestine Oriental Society* 19 (1939–40) 314–36; Z. Yeivin, "The Synagogue of Eshtemoa," in Levine (ed.), *Ancient Synagogues Revealed*, 120–22; idem, "Eshtemoa," in Stern (ed.), *NEAEHL*, 423–26. No final reports on these excavations have yet been published.

52. Mayer and Reifenberg, "The Synagogue of Eshtemo'a," 315.

53. Yeivin, "Eshtemoa," 426.

54. *Ibid.*, 425.

55. Mayer and Reifenberg, "The Synagogue of Eshtemo'a," 318.

56. *Ibid.*

57. Mayer and Reifenberg, "The Synagogue of Eshtemo'a," 319.

58. Yeivin, "The Synagogue of Eshtemoa," 121.

59. Idem, "Eshtemoa," 424.

60. See Schick, *The Christian Communities of Palestine*, 142.

61. Larsow and Parthey, *Eusebii*, 41, lines 9–12.

Horvat 'Anim (Khirbet Ghuwein et-Tahta or el-Gharbiyya) is located on a hill 685 m above sea level, 19 km south of Hebron, to the east of the ancient road from Eshtamo'a to the Be'er-sheva' Basin. The relatively low hill is connected only on the north to a higher ridge, and is surrounded on the other sides by wadis. The site is identified with western or greater Anaea of the Roman-Byzantine period, one of the large Jewish villages mentioned by Eusebius. The contemporary Christian village of eastern Anaea (now identified with Khirbet Ghuwein el-Fauqa or esh-Sharqiyya) is located nearby.⁶² In 1986–87, western Anaea was surveyed by Z. Ilan, who identified the remains of an ancient synagogue. The synagogue was excavated in 1988–89 by Ilan and D. Amit.⁶³

The ceramic material points to a fourth- to seventh-century date for the construction and occupation of the synagogue. Although the building apparently ceased to function as a synagogue by the end of the seventh century, the pottery and coins indicate that occupation continued through the eighth century to the ninth or tenth centuries. According to the preliminary report, at this time a mosque was installed in the building:

In the Early Moslem period, a structure was erected inside the building, filling its entire width and three quarters of its length. This structure was probably a mosque. The synagogue floor continued to be used, but the main entrance was blocked and only the smaller entrance, whose threshold was raised, remained in use. A masonry platform 0.8 m. high (minbar?), flanked by benches, was exposed in the center of the south part of the new structure. The walls of this structure, the platform and the benches were built of stones dismantled from the synagogue building. Mosques were also built in the nearby synagogues of Susiya and Esh-temo'a. In the Mamluk period, the structure no longer served as a mosque; poorly built walls and rooms reusing stones from the synagogue were erected in and around what had been a mosque.⁶⁴

Amit now doubts that the building functioned as a mosque in the early Islamic period, because of the absence of a mihrab and the dubious identification of the minbar.⁶⁵ Instead, the presence of large numbers of cooking and storage vessels, as well as glazed bowls, water jars of buff ware, and oil lamps associated with this phase points to domestic activity. The pottery and coins indicate that, whatever its nature, the early Islamic activity in this building dates to the eighth–ninth centuries, and perhaps into the tenth century. The coins recovered in the excavations present a continuous sequence from the fourth or fifth century through the second half of the eighth century. The relevant coins are:

- (1) Constans II, 642/43
- (2) Al-Kasim bin Ubaidallah, 116–24 A.H./734–42
- (3) Marwan II, 131 A.H./748
- (4) 'Abd Allah al-Mansur, 156 A.H./772
- (5) Muhammad al-Mahdi, 165 A.H./781
- (6) Muhammad al-Mahdi, 167 A.H./783
- (7) Harun al-Rashid, 185 A.H./801

Even without the conversion of the synagogue into a mosque during the early Islamic period, this occupation phase at Horvat 'Anim appears to be contemporary with that of the mosques at Khirbet Susiya and

62. Eusebius refers to this village as follows: "Anim, in tribu Judae. est vicus Anea iuxta alterum de quo supra diximus, ad orientalem plagam respiciens, cunctis habitatoribus Christianis"; see Larsow and Parthey (ibid.), 44, lines 15–16; 45, lines 1–2. The remains of a church located to the east of the settlement were discovered in a survey; see Barouch, "Tell Zif and the Establishment of Christianity," 179–81.

63. Amit, *The Synagogues at Horvat Ma'on and Horvat 'Anim*; Z. Ilan and D. Amit, "Horvat 'Anim, Synagogue," *Excavations and Surveys in Israel* 7–8 (1988–89) 6–8; D. Amit, "'Anim, Horvat," in Stern (ed.), *NEAEHL*, 62; also see idem, "Architectural Plans of Synagogues."

64. Ilan and Amit, "Horvat 'Anim, Synagogue," 7.

65. Amit, personal communication (July 1998); see Amit, *The Synagogues at Horvat Ma'on and Horvat 'Anim*.

Eshtamo'a. There is no indication of whether the synagogue at Horvat 'Anim was abandoned before the early Islamic structural modifications were made.

Khirbet Yattir

Jether, in tribu Juda civitas sacerdotialis. et nunc est villa praegrandis Jethira nomine in vice-simo millario Eletheropoleos; habitatores quoque eius omne Christiani sunt. sita est autem in interiori Daroma iuxta Malathan. diximus de hac et supra.⁶⁶

Khirbet Yattir is located on a rocky hill in the southern Judean mountains, about 12 km northwest of Arad. The site is identified with biblical Yattir and Roman-Byzantine Iethira, and is one of the two Christian villages in the Darom mentioned by Eusebius.⁶⁷ Today the site lies in the midst of a forest planted by the Keren Kayemet LeIsrael. The line of trees terminates just to the east of the site, at Israel's pre-1967 border with Jordan (the Green Line). From 1995 to 1999, excavations were conducted at Khirbet Yattir under the direction of H. Eshel (1995–99), E. Shenhav (1995–99), and J. Magness (1997–99). Because of its proximity to the old border, the site was never previously excavated.

The hill on which the ancient settlement was built is made of limestone overlaid by chalk. The chalk is covered by a hard crust called *nari*. Once the *nari* is pierced, cisterns and caves can easily be hewn into the soft, water-impermeable chalk layer below. The visible ancient remains, including stone walls and occasional intact vaults, encircle the eastern side of the hill, forming a crescent that leaves the western slope bare. Wells located to the east of the site attracted settlement early on. Generally, each ancient house at Khirbet Yattir had its own cistern in an open courtyard and a cave cut into the chalk layer that could be used for storage or dwelling purposes.

Two of the areas excavated to date have yielded substantial remains of the Byzantine and/or early Islamic periods: Area C, on a spur to the south of the site; and Area D, close to the top of the northern side of the site.⁶⁸

Area C. Prior to the excavations, four columns and an apse were visible here above the ground. The excavations revealed the remains of a church paved with a mosaic floor. All of the church except for the southern part of the southern aisle has been cleared down to the mosaic floor, which lay 1.80 m below the present ground level. The hall contained two rows of six columns each, which stood on pedestals. No two

66. Larsow and Parthey, *Eusebii*, 233, lines 4–9.

67. For eastern Anaea, the other Christian village mentioned by Eusebius, see n. 62 above. Eusebius mistakenly identified the village of Ether of Simeon mentioned in Joshua 19:7 with Khirbet Yattir (Iethira) in Judah, mentioned in Joshua 15:48 (Yattir is also mentioned in Joshua 21:14; 1 Samuel 30:27; 2 Samuel 23:28; 1 Chronicles 6:42, 11:40). In Eusebius's *Onomasticon*, both villages are localized at the village of Iethira. This confusion is reflected in the Madaba map, where the village of "Iethor, also Iethira" is represented southwest of Be'er-sheva', perhaps on the road to Elusa. Although Avi-Yonah proposed that the mosaicist was therefore depicting the Ether of Simeon rather than Iethira in Judah, no remains of a Roman-Byzantine village have been discovered in the area. See M. Avi-Yonah, *The Madaba Mosaic Map, with Introduction and Commentary* (Jerusalem: Israel Exploration Society, 1954) 72–73; H. Donner, *The Mosaic Map of Madaba: An Introductory Guide* (Kampen: Kok Pharos, 1992) 72.

68. For a preliminary report on the 1995–97 seasons, see H. Eshel, E. Shenhav, and J. Magness, "Khirbet Yattir," *American Journal of Archaeology* 102 (1998) 797–99; for more detailed preliminary reports on the 1995–99 seasons, see H. Eshel, J. Magness, and E. Shenhav, "Interim Report on Khirbet Yattir in Judea: A Mosque and a Monastic Church," *Journal of Roman Archaeology* 12 (1999) 411–22; H. Eshel, J. Magness, and E. Shenhav, "Khirbet Yattir: A Note on the Church in Area D," *Journal of Roman Archaeology* 13 (2000) 401–2; Hanan Eshel, J. Magness, and E. Shenhav, "Khirbet Yattir, 1995–1999: Preliminary Report," *Israel Exploration Journal* 50 (2000) 153–68.

of the pedestals are alike. Some of the capitals are conical in shape and are embossed with crosses, while others are reused Nabatean capitals of the first century C.E. The aisles are paved with a simple white mosaic carpet decorated with stylized flowers consisting of a black crowstep pattern representing the stalk, and red tesserae arranged in the form of a W for the petals. The mosaic in the apse, only part of which is preserved, is decorated with a geometric pattern. Two phases can be distinguished in the mosaic floor of the nave. Four birds and medallions of vines can still be discerned in the earlier floor, most of which has disappeared. The later floor is divided into 23 horizontal strips which contain magical symbols and the abbreviations of holy names (*nomina sacra*). A large circle containing a cross is located in the center of the floor. Below it (to the west) lies a large cross, and below that, a panel containing a 12-line Greek inscription, whose text reads as follows:

This work was completed in the month of March in the sixth Indiction, year 526 of the era of the city, for the benefit of the salvation and the aid of Thomas the most holy, abbot of the monastery. [The work was done] by my hands, Zacharis, son of Yeschi, the builder, servant of God.

Since the inscription is dated according to the calendar of Provincia Arabia, the city mentioned in connection with its date is probably Elusa. If this is the case, the inscription dates to 631/632. Its contents indicate that this was a monastic church.

Excavations in the atrium have revealed another complete, 6-line Greek inscription set in the white mosaic floor in front of the entrance to the basilica. It reads as follows:

All of the work in building the church including the mosaic was carried out in the time of Yochanan [John] ben Zachariah, who honors God, the diakon, the head of the monastery, during the month of May in the ninth Indiction in the year 483 according to the city's calendar.

Since it is reasonable to assume that this inscription uses the same era as the one in the nave of the church, it dates to 588/589.⁶⁹

An ancient cistern that was used up to modern times is located in the center of the atrium. Another cistern, which has a bell-shaped interior and is roofed with a stone vault was discovered in the southern part of the atrium. Marble slabs from the church were found lying directly beneath its opening. The slabs appear to have been deliberately thrown or placed on top of the cistern's plastered floor.

During the Mamluke period, the church was cleared for reoccupation down to the level of the mosaic floor, and three rooms were built along its northern side. Therefore, very little Byzantine pottery was discovered on the floor, though hundreds of terracotta roof tile fragments and dozens of nails indicate that it had a pitched roof.

Area D. Excavations here have revealed the remains of a large Byzantine church. The building has a basilical plan, with long, parallel ashlar walls running northeast–southwest. The northernmost wall of the building contains several stones in secondary use, including a fragment with an incised *tabula ansata*. Because the eastern end of the church had washed down the slope, its original length cannot be determined, but the nave was over 12 m long. The nave was 12.5 m wide, and each aisle was 2 m wide. The stylobate supported pedestals for columns. The church was not oriented due east but deviated about 40 degrees to the southeast, perhaps due to the limited size of the terrace on which it was built. The church was originally paved with polychrome mosaics using small tesserae which have survived in only a few spots. In the northwest corner of the nave, next to the stylobate, an eagle facing right is preserved, and a matching eagle was presumably located in the southwest corner. The polychrome mosaic was succeeded by a plain, white mosaic of larger, coarser tesserae. Opposite the entrance to the narthex into the southern aisle a complete, four-line Greek dedicatory inscription was found, framed within a *tabula ansata*. It reads:

69. This date, however, creates a two-year discrepancy with the indiction mentioned.

In the days of the most holy Bishop Theodoros and Sabinios the Presbyter, all of the work on the mosaic was done [by] Absobo and Jonathan and Jeremiah in the 14th Indiction.

Because Bishop Theodoros and Sabinios the Presbyter are unknown, this inscription cannot be closely dated.

The narthex and atrium were paved with a white mosaic. A capital decorated with an unusual conch shell motif was found reused in a room built after the Byzantine period to the south of the church. Two large Corinthian pilaster capitals (one found before excavation on the surface and the other found lying on the stylobate of the atrium) may belong to pilasters that supported the roof of a hall or corridor that encircled the atrium. Two more pedestals and several stone columns in secondary use on the slope below probably came from this building. There is evidence for domestic occupation in the church during the eighth to ninth or tenth centuries. At this time, a cistern was dug in the narthex, and the mosaic inscription was covered with plaster. The mouth of the Byzantine cistern in the atrium west of the church was built up in the Mamluke period, to raise it to the contemporary ground level. Reused architectural members were incorporated into the cistern's mouth. There is other evidence for Mamluke period occupation in the building as well.

Khirbet Yattir in the Early Islamic Period. Early Islamic pottery, mostly from mixed fills, was found in almost all of the excavated areas at Yattir. The most substantial quantities, however, come from Area D, where they are clearly associated with the occupation of the building during the eighth to ninth centuries. There is no archaeological basis for determining whether there were changes in the religious orientation of the village's population after the Muslim conquest. The domestic nature of the early Islamic pottery found on top of the floors of the building in Area D and the presence of installations built on top of the mosaics suggest that by this time the building had ceased to function as a church. By the Mamluke period at least part of the population was Muslim, as attested by a Mamluke mosque uncovered in Area B. There is also no evidence that the buildings in Areas C and D functioned as churches during the Mamluke period, although both buildings were cleared and reoccupied. Because of the Mamluke reoccupation of these buildings, almost no Byzantine pottery was found on top of their floors, making it difficult to determine their fate during the Byzantine to early Islamic transition.

Beth Guvrin (Eleutheropolis)

In the year 200, the Roman emperor Septimius Severus refounded Beth Guvrin as the *polis* of Eleutheropolis. It served as the capital of Idumaea and controlled the largest city territory in late Roman Palestine. Eleutheropolis flourished through the Roman and Byzantine periods. After the Muslim conquest in the seventh century, it again became known as Beth Guvrin (in Arabic, Beit Jibrin). Excavations conducted since 1981 by A. Kloner have brought to light a Roman amphitheater and inn, and a Crusader church and fortifications. Though remains of the Byzantine and early Islamic periods are mentioned in the preliminary reports, detailed information is not provided.⁷⁰

Much of the archaeological evidence for the population of Eleutheropolis in the Roman and Byzantine periods comes from one of its cemeteries, the so-called Ahinoam Cave Cemetery.⁷¹ Seventy-four burial caves cut into the soft chalk of the rolling hills were found in a survey of the cemetery, which is located

70. See A. Kloner, "Beth Guvrin," in Stern (ed.), *NEAEHL*, 195–201; A. Kloner and E. Asaf, "Bet Guvrin—1992," *Excavations and Surveys in Israel* 14 (1994) 114–18; A. Kloner and M. Cohen, "Bet Guvrin—1994," *Hadashot Arkheologiyot* 105 (1996) 140–42 (in Hebrew).

71. For the Ahinoam Cave Cemetery, see J. Magness and G. Avni, "Jews and Christians in a Late Roman Cemetery at Beth Guvrin," in H. Lapin (ed.), *Religious and Ethnic Communities in Later Roman Palestine* (College Park: University Press of Maryland, 1998) 59–86.

about half a kilometer south of Beth Guvrin. The numismatic and ceramic evidence indicates that the cemetery was in use from the late second or third century through the first half of the eighth century. Excavations in four of the burial caves yielded 483 oil lamps and lamp fragments. Jewish and Christian symbols and inscriptions were found on some of the lamps and on the walls and lintels of two of the excavated burial caves. The evidence provided by the oil lamps suggests that the religious orientation of the occupants of these four caves changed over time. Jewish symbols are attested only on lamps representing types dating from the late second to fourth centuries, while Christian symbols occur only on lamps dating from the fourth or fifth to late seventh or early eighth century. The oil lamps thus suggest that the religious orientation of the occupants of these four caves changed over time from Jewish to Christian. Not all of the burial caves in the Ahinoam Cave Cemetery underwent this process of transformation, because some appear to have been Christian from the start. However, Christian tombs do not appear to be attested before the fifth century. The evidence for the transformation of the cemetery does not indicate whether this reflects the conversion of Jewish families to Christianity or the replacement of a Jewish population by an unrelated Christian one. And if a Jewish population continued to co-exist alongside the Christian population, why are no Jewish symbols represented after the fourth century? The process of transformation suggested by the evidence from the Ahinoam Cave Cemetery receives indirect support from historical sources. During the second and third centuries, Eleutheropolis was a Roman urban center with a predominantly pagan population mixed with some Jews. After the Bar-Kokhba Revolt, Eleutheropolis was among the cities with a predominantly non-Jewish population where Jews were permitted and encouraged to settle. The population adopted Christianity early on; in 325 a bishop from Eleutheropolis participated in the Council of Nicaea. By the sixth century, the city was clearly Christian in character. However, two finds point to Jewish presence at Eleutheropolis during this period. The first is an Aramaic inscription on a limestone column drum, which was built into one of the houses in the village of Beit Jibrin and was published by E. L. Sukenik. Although it does not mention a synagogue, Sukenik noted that the formula used is characteristic of synagogue dedications. He seems to suggest a post-third-century date for the undated inscription. The second find is a column capital decorated with a seven-branched menorah in relief, which was found in 1874 by C. Clermont-Ganneau in the same village as the inscribed drum and may have originated in the same building.⁷²

The absence of oil lamp types that postdate the mid-eighth century in the Ahinoam Cave Cemetery suggests that burials ceased by then. This accords well with the early Islamic date proposed for the quarrying of the bell-shaped caves, which cut into and must therefore postdate the cemetery. The caves' distinctive bell shape was produced by a special method of quarrying. The quarried chalk was used for building and as raw material for the manufacture of lime and cement. Al-Muqaddasi, who reported large numbers of marble quarries in the Beth Guvrin region in the tenth century, is believed to have been referring to the chalk quarries in the bell-shaped caves. Arabic inscriptions found on the upper walls of some of the caves were incised while quarrying was in progress. Crosses found alongside the inscriptions indicate that they were incised by Christians who spoke and wrote Arabic.⁷³ Thus, at least some of Beth Guvrin's population remained Christian for some time after the Muslim conquest.

Additional archaeological evidence for continued Christian presence at Beth Guvrin is provided by a Byzantine church on a hill to the north of the village of Beit Jibrin, which was excavated by D. C. Baramki in 1941–42.⁷⁴ Most of the human and animal figures in the mosaic floor of the church were defaced by

72. For the inscription, see E. L. Sukenik, "A Synagogue Inscription from Beit Jibrin," *Journal of the Palestine Oriental Society* 10 (1930) 76–78; for the capital, see C. Clermont-Ganneau, *Archaeological Researches in Palestine during the Years 1873–1874* (London: Palestine Exploration Fund, 1896) 2.442.

73. For the bell-shaped caves, see Kloner, "Beth Guvrin," 200–201.

74. C. Baramki, "A Byzantine Church at Mahatt el Urdi, Beit Jibrin: 1941–1942," *Liber Annuus* 22 (1972) 130–52. For more information on Christianity at Eleutheropolis, see B. Bagatti, "Il Cristianesimo ad Eleuteropoli," *Liber Annuus* 22 (1972) 109–29.

iconoclastic activity, apparently during the early Islamic period.⁷⁵ Later walls and other changes to the building reflect a second phase of occupation. Since much of the pottery described as having been found on top of the floors dates to the eighth to tenth centuries, the building was clearly occupied through that time, though it did not necessarily continue to function as a church.⁷⁶ This phenomenon is discussed more fully in connection with the church at Beit Loya, discussed below.

Beit Loya

Horvat Beit Loya (Khirbet Beit Lei) is located on a hill about 5.5 km southeast of Beth Guvrin. Excavations directed by J. Patrich and Y. Tsafir in 1983 and 1986 revealed the remains of a Byzantine church with ancillary buildings.⁷⁷ Only brief preliminary reports on the excavations have been published to date. The church complex, which is enclosed by a wall, may have been a church within a monastery at the outskirts of a village. There is an atrium on the west side of the church, a baptistery and oil press on its south side, and a chapel on its north side. The human and animal figures depicted in the mosaic floors of the basilica and narthex were defaced by iconoclastic activity, apparently in the early eighth century. The destroyed figures were immediately repaired with the same mosaic tesserae, clearly reflecting a desire not to cause excessive damage. In addition, while all of the human figures were damaged, a number of the animals remained intact, especially in the narthex.⁷⁸ The pottery from the excavations points to a date of ca. 500 for the construction of the church. However, the fact that most of the pottery found on top of the floors of the church dates to the eighth–tenth centuries indicates that occupation continued well beyond the Muslim conquest.⁷⁹ The nature of the early Islamic occupation and the religious orientation of the inhabitants in this period are unclear. On the one hand, the careful manner in which the damage was done to the figured images in the mosaics suggests that the iconoclasm was carried out by Christians rather than Muslims. The evidence from Beit Loya (and from the church at Mahatt el Urdi at Beth Guvrin mentioned above) accords with R. Schick's observation that most iconoclastic activity seems to have taken place at the end of the Umayyad period.⁸⁰ Apparently, the churches at Beit Loya and Beth Guvrin continued to function well into the eighth century, reflecting continued Christian presence. On the other hand, the presence of later walls inside both churches and the domestic nature of the pottery found on top of the floors suggest that by the ninth to tenth centuries the buildings had ceased to function as churches.⁸¹

Horvat Berachot

Horvat Berachot is located to the south of Bethlehem and east of Kfar Etzion, on the Jerusalem–Hebron road. Although this site lies to the north of the Darom, I include it here because of the evidence for the Byzantine to early Islamic transition. In 1976, Y. Tsafir and Y. Hirschfeld conducted salvage excavations in the Byzantine church at the site. The church is located to the south of a hill on which the settlement

75. Baramki, "A Byzantine Church at Mahatt el Urdi," 146.

76. *Ibid.*, 152.

77. For the church complex at Beit Loya, see J. Patrich and Y. Tsafir, "Beth Loya, Horvat," in Stern (ed.), *NEAEHL*, 210–13.

78. Schick, *The Christian Communities of Palestine*, 199.

79. My report on the pottery is forthcoming in the final excavation report. Small quantities of Ayyubid and Mamluke pottery were also found.

80. Schick, *The Christian Communities of Palestine*, 207–9; see pp. 218–19 for a discussion of the reasons behind the iconoclastic damage.

81. Based on my study of the pottery from the excavations; see also Baramki, "A Byzantine Church at Mahatt el Urdi," 146, 152.

was located. Two main architectural phases, dating to the Byzantine and Mamluke periods, could be distinguished in the densely built dwellings of the settlement. The excavations in the church revealed three main occupational phases. In the first phase, rites and prayers were held in a small natural cave that was plastered and paved with a mosaic. The excavators dated this phase to the second half of the fourth century. In the second stage, a church was built over the cave, which was remodeled into a crypt. According to the excavators, this phase dates to the second half of the fifth or first half of the sixth century, though they favor a date in the second half of the fifth century.⁸² After the Muslim conquest, when the church was abandoned and destroyed, the site was occupied by “Arab squatters.”⁸³

A review of the excavation report suggests a slightly different interpretation of the occupational sequence at Horvat Berachot. The date of the original cave shrine is based on the discovery of a complete oil lamp of the Beit Nattif type.⁸⁴ The excavators’ suggested date in the second half of the fourth century for this phase is therefore reasonable. However, the two sherds they illustrated from below the mosaic floor of the church indicate that a date in the second half of the fifth century for the construction of the church is too early.⁸⁵ The first is the rim of a fifth- to sixth-century Jerusalem bag-shaped storage jar with infolded rim.⁸⁶ The second piece, a rim made of “fine reddish clay with a light brown slip,” apparently belongs to a Cypriot Red Slip Ware bowl, Form 9, dated from ca. 550 to the end of the seventh century.⁸⁷ Thus, the church and the mosaic floor were constructed no earlier than the sixth century, perhaps no earlier than the mid-sixth century.

A vaulted chapel paved with a mosaic floor was built under the chancel in the eastern part of the church. It was almost completely filled with debris. The layer of debris above the mosaic, which was sealed by a later early Islamic dirt floor, contained “finds of the Byzantine period,”⁸⁸ including a bowl, a jug, and a storage jar.⁸⁹ Although the bowl appears to be an early Islamic variant of a Fine Byzantine Ware bowl, this cannot be established with certainty because no description of the fabric is provided.⁹⁰ However, the ridge midway down the neck of the storage jar is characteristic of an eighth- to ninth-century date.⁹¹ According to the excavators, since these sherds belong to the last period of use of the crypt and the days after its desertion, they support an early date for this event, not long after the Arab conquest in the seventh century.⁹² Instead, these sherds, together with other evidence, indicate that occupation continued, apparently without interruption, well into the early Islamic period. Other evidence for early Islamic occupation includes the excavators’ observation that, “All around the main hall of the church many sherds of

82. Y. Hirschfeld and Y. Tsafrir, “Berachot, Horvat,” in Stern (ed.), *NEAEHL*, 188–90; Y. Tsafrir and Y. Hirschfeld, “The Church and Mosaics at Horvat Berachot, Israel,” *Dumbarton Oaks Papers* 33 (1979) 323.

83. *Ibid.*, 323.

84. *Ibid.*, 315; 313, N; fig. 34.

85. *Ibid.*, 323.

86. *Ibid.*, 313, H; Magness, *JCC*, 224–25, Storage Jars Form 4B.

87. Tsafrir and Hirschfeld, “The Church and Mosaics at Horvat Berachot,” 313, I; see Hayes, *LRP*, 379–82. Though the description of the fabric suggests that this bowl should be identified as Cypriot Red Slip Ware, based on the profile and the brown slip, it could also be a sixth-century variant of a Jerusalem rouletted bowl (see Magness, *JCC*, 188, Rouletted Bowls Form 2A).

88. Tsafrir and Hirschfeld, “The Church and Mosaics at Horvat Berachot,” 318.

89. *Ibid.*, 313, J, K, L.

90. *Ibid.*, 313, J; see Magness, *JCC*, 199–200, FBW Bowls Form 2B.

91. Tsafrir and Hirschfeld, “The Church and Mosaics at Horvat Berachot,” 313, L; J. C. Finkelstein, “The Islamic Pottery from Khirbet Abu Suwwana,” *Atiqot* 32 (1997) fig. 5:7–11; see my discussion of this type in the chapter on the central Negev.

92. Tsafrir and Hirschfeld, “The Church and Mosaics at Horvat Berachot,” 318; on p. 323 they suggest that the church was probably deserted in the second half of the seventh century.

the Byzantine as well as the Early Arab period were collected. Among the latter, fragments of oil lamps, a fragment of a painted jar, and a glazed sherd are the most important.”⁹³ In the crypt, they found a hard earth floor of the early Islamic period some 12–15 cm above the mosaic. According to the excavators, in this period the south entrance of the crypt was blocked and the crypt was most likely used as a dwelling place or for storage. A Kufic inscription was incised on the south wall of the crypt, about 1.25 m above the early Islamic floor level, on the east (left) side of the blocked south staircase.⁹⁴ It is a pious invocation, dated on the basis of paleography to the seventh to eighth century. Two more, mostly illegible Kufic inscriptions were found on the walls of the crypt.⁹⁵ The pottery found in the crypt includes channel-nozzle oil lamps whose high tongue handles indicate that they could be later than the eighth-century date proposed by the excavators.⁹⁶ Although the excavators’ suggested eighth-century date is based on the absence of glazed pottery in this stratum, as noted above, they refer elsewhere to glazed ware.⁹⁷ Another channel-nozzle lamp fragment, misassigned to the Byzantine period, was found in Area B, outside the north wall of the church.⁹⁸ Two more lamps of this type recovered in this area are illustrated.⁹⁹ “A large quantity of Byzantine and Arab sherds mixed together”¹⁰⁰ was found in Area A, outside the east wall of the church. Modifications made to the narthex and atrium of the church are described as follows: “Inside the narthex there are rough fixtures from the period of secondary occupation—walls, steps, and stone installations. They all belong to the Early Arab settlers who occupied the place after it had been deserted by the Christians. Some of these secondary walls do not stand directly on the mosaic but on a thin layer of hard earth which had covered the mosaic, thus providing evidence that there had been a brief intermediate period when the site was totally abandoned.”¹⁰¹ “In the atrium, too, were discovered remains of secondary, later use. They consist mainly of foundations of walls.”¹⁰² There is thus evidence for substantial early Islamic occupation at Horvat Berachot.

The extent of the early Islamic remains, which include substantial quantities of pottery and clearly visible structural modifications to the church contradict the excavators’ interpretation of this occupation as that of squatters. The fact that pottery types dating to the eighth to ninth centuries were discovered beneath the dirt floors found above the mosaics indicates that this occupation was more than transitory. Though there is no iconoclastic damage to the mosaic floor at Horvat Berachot (apparently because by the eighth century the church had ceased to function as a church), the excavations yielded the same kind of evidence for early Islamic occupation (later walls and eighth- to tenth-century pottery) as in the churches at Beit Loya and Beth Guvrin. On the other hand, whereas the latter two churches seem to provide evidence of continued Christian presence into the eighth century, at Horvat Berachot the Kufic inscriptions (including pious invocations) and the fact that the building no longer functioned as a church after the seventh century indicate that by the eighth century the inhabitants were Muslim.

93. *Ibid.*, 309.

94. *Ibid.*, 310; this inscription was published by R. Drory and J. Drory, as an appendix to Tsafir and Hirschfeld (*ibid.*, 324–26).

95. *Ibid.*, 326.

96. *Ibid.*, 314, S, T; 319, V, W; see Magness, *JCC*, 258, Oil Lamps Form 5.

97. Tsafir and Hirschfeld, “The Church and Mosaics at Horvat Berachot,” 319, 309.

98. *Ibid.*, 320; 313, O; see Magness, “The Dating of the Black Ceramic Bowl,” 203–4.

99. Tsafir and Hirschfeld, “The Church and Mosaics at Horvat Berachot,” 320; 314, R and U.

100. *Ibid.*, 320.

101. *Ibid.*, 321.

102. *Ibid.*, 323.

CHAPTER 5

The Limes in Southeastern Judea

The *limes Palaestinae* has traditionally been understood as part of a fortified line of defense (that is, a line of forts and fortresses) erected by the Romans to protect the eastern borders of the empire from nomadic invasions and the Persian threat.¹ B. Isaac recently challenged this view, proposing that the term *limes* was not a defensive line at all but was used from the fourth century onward to designate a frontier district under the command of a *dux*. He believes that it denotes an administrative concept unconnected with the military structures that may have existed in the area. In the course of time it came to be used as a geographic instead of an administrative concept, to indicate the eastern desert.²

The date of the origin of the *limes Palaestinae* is also debated. Though some scholars have suggested that it developed already during the Flavian period or earlier, there seems to be a consensus that the system reached its peak in the fourth–fifth centuries, as a result of Diocletian’s reorganization of the Arabian frontier.³ The evidence for the existence of the *limes* in Palestine by the fourth century comes from various sources, such as the *Notitia Dignitatum* [ND], the *Tabula Peutingeriana*, Eusebius’s *Onomasticon*, scattered references to military affairs in other literary sources, and archaeological remains. As Isaac has noted, the nomadic tribes that supposedly were a constant threat to the eastern frontier are hardly mentioned in Roman sources before the fourth century.⁴ The Oriens portion of the *Notitia Dignitatum* of ca. 400 provides

1. This chapter has been published as an article; see Magness, “Redating the Forts at Ein Boqeq, Upper Zohar, and Other Sites.” For a recent and comprehensive bibliography on the *limes*, see B. Isaac, *The Limits of Empire: The Roman Army in the East* (Oxford: Clarendon, 1992). For a traditional view of the *limes*, see S. T. Parker, *Romans and Saracens: A History of the Arabian Frontier* (American Schools of Oriental Research Dissertation Series 6; Winona Lake, Ind.: Eisenbrauns, 1986); idem, “The Defense of Palestine and Transjordan from Diocletian to Heraclius,” in L. E. Stager, J. A. Greene, and M. D. Coogan (eds.), *The Archaeology of Jordan and Beyond: Essays in Honor of James A. Sauer* (Studies in the Archaeology and History of the Levant 1; Winona Lake, Ind.: Eisenbrauns, 2000) 367–88.

2. Isaac, *The Limits of Empire*, 408. For reviews of Isaac’s book, see D. L. Kennedy (ed.), *The Roman Army in the East* (Journal of Roman Archaeology Supplementary Series 18; Ann Arbor, Mich.: Journal of Roman Archaeology, 1996) 7; also see C. R. Whittaker, “Where Are the Frontiers Now?” in *ibid.*, 25–41; Parker, “The Defense of Palestine and Transjordan.”

3. Isaac, *The Limits of Empire*, 129. Also see I. Shatzman, “The Beginning of the Roman Defensive System in Judaea,” *American Journal of Ancient History* 8 (1983) 130–60; idem, “The Problems of Defense in Southern Judaea in the Period after the Great Revolt,” *Cathedra* 30 (1984) 3–32 (in Hebrew). After reviewing the literary and archaeological evidence, Shatzman concluded that, although some components of the *limes* system began to evolve before Diocletian’s time, the institutionalization of the system is a late-third-century phenomenon. He also highlighted the methodological problems inherent in relying upon the material collected in archaeological surveys for the interpretation and dating of sites, one of the issues central to this study. I am grateful to Israel Shatzman for sending me an offprint of the first article and to Hanan Eshel for bringing to my attention the second one. Also see I. Shatzman, *The Armies of the Hasmoneans and Herod* (Tübingen: Mohr, 1991) 238–46.

4. Isaac, *The Limits of Empire*, 68.

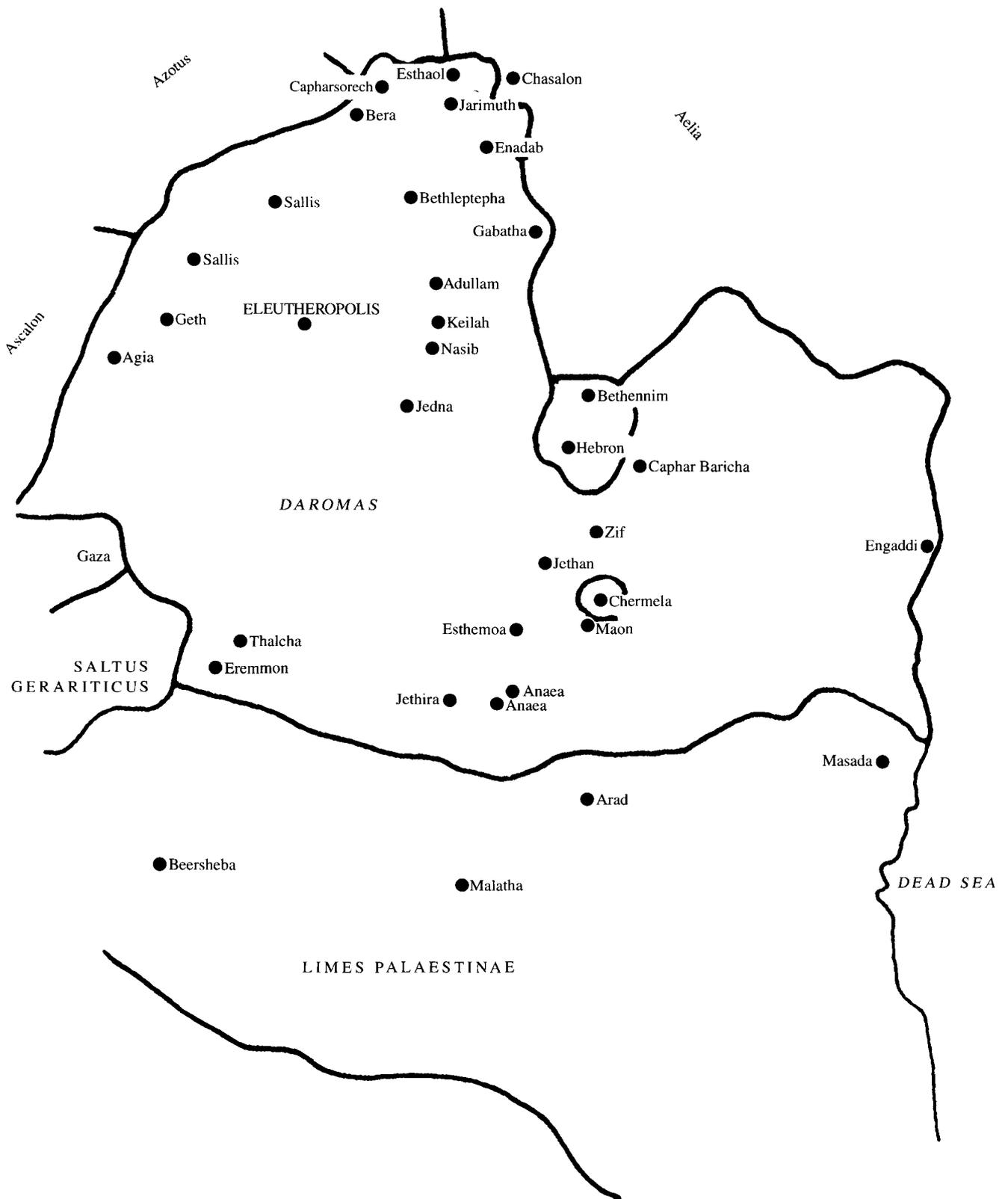


Fig. 6. Map of the territories of Eleutheropolis and the Limes Palaestinae. From M. Avi-Yonah, *The Holy Land from the Persian to the Arab Conquests (586 B.C. to A.D. 640): A Historical Geography* (Grand Rapids: Baker, 1966), map 16 on p. 160. Reprinted with permission of Baker Book House.

information on the command structure and distribution of army units along the eastern frontier, whose disposition is thought to have changed little since Diocletian's time.⁵ The southern Judean fortresses that are mentioned include Chermoula or Chermela (Carmel), Malatha (Malhata), Berosaba (Be'er-sheva'), and Thamara (Mezad Tamar?).⁶ Since the fortresses at the first three sites have not been excavated, and the final report on the excavations at Mezad Tamar has not yet been published, there is no archaeological basis for evaluating their date.⁷ Nevertheless, the references to these sites in the *Notitia Dignitatum* and in other ancient sources make it reasonable to assume that they were bases for Roman military units during the fourth and fifth centuries.⁸

This chapter focuses instead on other sites in southeastern Judea, which have been identified by some scholars as forts belonging to the *limes Palaestinae*, in an apparent attempt to "connect the dots" and create a continuous line of defense. Specifically, these are the fort at 'Ein Boqeq, excavated by M. Gichon, the fort at Upper Zohar, excavated by R. P. Harper, and a series of sites along the eastern side of Mount Hebron that were surveyed and identified as *limes* forts by Y. Hirschfeld. I have restricted my discussion to these sites to keep it geographically coherent and because it is difficult to find enough published information on the archaeological material from other supposed *limes* forts in Judea and the Negev to reevaluate their chronology meaningfully. The recently published final reports on the excavations at 'Ein Boqeq and Upper Zohar served as the catalysts for this analysis. S. T. Parker's review of these two reports highlighted the problem of the nature and date of the *limes Palaestinae*.⁹ Despite the remarkable similarities between the ceramic and numismatic material and the plans of the forts, the excavators of 'Ein Boqeq and Upper Zohar reached radically different conclusions regarding the date and function of their respective sites. At 'Ein Boqeq, the construction of the fort is dated to the first half of the fourth century and is associated with the *limes* system, while the establishment of the fort at Upper Zohar, which is interpreted as a lookout station, is dated to the late fifth century. In the following review of the archaeological evidence, I demonstrate that the forts at 'Ein Boqeq and Upper Zohar and the sites surveyed by Hirschfeld on the eastern side of Mount Hebron could not belong to the *limes Palaestinae* of the fourth and fifth centuries.

5. *Ibid.*, 161–62; Parker, *Romans and Saracens*, 136; for other literary sources, see Isaac, "The Army in the Late Roman East," 451–53.

6. *ND Or.* XXXIV 5, 16, 18, 20, 40, 45. For other sources on these sites, see Tsafir et al., *Tabula Imperii Romani*, s.vv. Beersheba I, Chermela, Malatha, Thamara.

7. For Malhata, there is only a brief description of a section cut through the fortress; see M. Kochavi, "Malhata, Tel," in Stern (ed.), *NEAEHL*, 936: "Only a small part of the fortress at the top of the higher part of the mound was exposed in section W. The excavations revealed two rooms, which were part of the fortress's casemate wall. They were paved with carefully laid stone slabs; each room contained sleeping "bunks," also lined with stone slabs, as well as stoves, silos, and other installations. Almost all the pottery and glass finds date to the last occupation phase of the fortress—the early Arab period." Gichon excavated the fort at Mezad Tamar, which he proposes identifying with Thamara. His claimed late-third to early-fourth-century construction date cannot be evaluated until the final excavation report is published. See M. Gichon, "Excavations at Mezad Tamar—'Tamara' 1973–75, Preliminary Report," *Saalburg Jahrbuch* 33 (1976) 80–94. The location of the military camp at Be'er-sheva' was only recently identified on the basis of aerial photographs; see P. Fabian, "The Late-Roman Military Camp at Beer Sheba: A New Discovery," in J. H. Humphrey (ed.), *The Roman and Byzantine Near East: Some Recent Archaeological Research* (Journal of Roman Archaeology Supplementary Series 14; Ann Arbor, Mich.: Journal of Roman Archaeology, 1995) 235–40.

8. Parker's excavations at the legionary fortress at el-Lejjun (Betthoro) in Jordan have indicated that it was erected during Diocletian's reign and abandoned by the mid-sixth century; see S. T. Parker, *The Roman Frontier in Central Jordan: Interim Report on the Limes Arabicus Project, 1980–1985, Parts I–II* (BAR International Series 340; Oxford: BAR, 1987).

9. *Idem*, "En Boqeq and Upper Zohar: Two Late-Roman Fortlets near the Dead Sea," *Journal of Roman Archaeology* 10 (1997) 580–86.

‘Ein Boqeq

‘Ein Boqeq (Arabic Umm Bagheq) is a small oasis on the southwest shore of the Dead Sea, about 13 km south of Masada. Excavations were conducted at the site from 1968 to 1976 under the direction of M. Gichon of Tel Aviv University. The recently published first volume of the final excavation report includes chapters on the stratigraphy, architecture, pottery, coins, small finds, and a historical overview.¹⁰ The excavations revealed the remains of a square (20 × 20 m) fort with four towers (6 × 6 m) projecting from its corners. The stone walls, which are constructed of two faces filled with rubble, still stand to a height of 6 m. The only gate is located in the middle of the southern wall. Two rows of rooms abutted the walls along the northern and eastern sides of the interior courtyard. The height of the external walls and the quantity of fallen stones suggest that these rooms had two storeys. The towers were also divided by wooden floors into two storeys, which probably had flat roofs. Gichon estimates that the garrison stationed at the fort numbered 45–65 soldiers. Based on the fort’s *tetrapyrgos* plan, Gichon has suggested identifying it with the site of Tetrapyrgia, mentioned by the Byzantine monk Anastasius in the first half of the seventh century.

Gichon distinguished five main occupation phases, separated by destruction levels apparently caused by fires and/or earthquakes. Beginning with the construction of the fort, he dates these phases as follows:

Phase I: the reign of Constantius II (337–361)

Phase II: from the late fourth to mid-fifth centuries

Phase III: from the mid-fifth century to the Persian invasion in 613/614

Phase IV: from the reconquest of Palestine by Heraclius to the Muslim conquest (ca. 624–635)

Phase V: the “Nachkastell-Periode,” consisting of the reuse of the now ruined fort for the manufacture and storage of nitrate in the Umayyad period (seventh century)¹¹

According to Gichon, the fort was constructed in the first half of the fourth century as part of Diocletian’s reorganization of the eastern frontier, in response to the Persian threat and nomadic incursions. Gichon regards ‘Ein Boqeq as part of a defensive zone established by the Romans in Palestine that was studded with forts and garrisons extending from the Mediterranean coast south of Gaza to the southern end of the Dead Sea: “In diesem fungierte En Boqeq als Flankenschutz am Toten Meer für den hinteren und zugleich wichtigsten Teil des cisjordanischen Limes.”¹² He has suggested that the soldiers stationed at the fort belonged to the Cohors I Flavia, whose headquarters were at Malatha, or to the Cohors I Palaestinorum, whose headquarters were at Thamara.¹³

10. M. Gichon, *En Boqeq: Ausgrabungen in Einer Oase am Toten Meer, Band 1: Geographie und Geschichte der Oase: Das Spätromisch-Byzantinische Kastell* (Mainz am Rhein: von Zabern, 1993).

11. Gichon, *En Boqeq: Ausgrabungen in Einer Oase*, 49–52.

12. *Ibid.*, 22.

13. *ND Or.* XXXIV, 40, 45; see M. Gichon, “‘En Boqeq” in Stern (ed.), *NEAEHL*, 396. Gichon, *En Boqeq: Ausgrabungen in Einer Oase*, 26, regards these soldiers as *limitanei* who farmed their own land. Isaac has noted, however, that the term *limitanei* refers to “soldiers serving in a *limes*, that is, a frontier district,” and therefore does not mean farmer soldiers or members of a peasant militia. In other words, it is a term that distinguishes the troops commanded by a *dux limitis*, who held a regional command, from the *comitatenses*, the field army. Thus, although these troops may have been recruited locally and could own land in a private capacity (which would have the same status as land owned by civilians), there is no reason to assume that they were engaged in cultivating the land. See Isaac, *The Limits of Empire*, 208–9. But Parker reports that floral and faunal analyses of the finds from the five forts excavated by the Limes Arabicus Project east of the Dead Sea indicate that domestic animals were being raised and wheat and barley were being cultivated locally, probably by the soldiers themselves. See S. T. Parker, “Geography and Strategy on the Southeastern Frontier in the Late Roman Period,” in W. Groenman-van Waateringe et al. (eds.), *Roman Frontier Studies 1995: Proceedings of the XVIth International Congress of Roman Frontier Studies* (Oxbow Monograph 91; Oxford: Oxbow, 1997) 118.

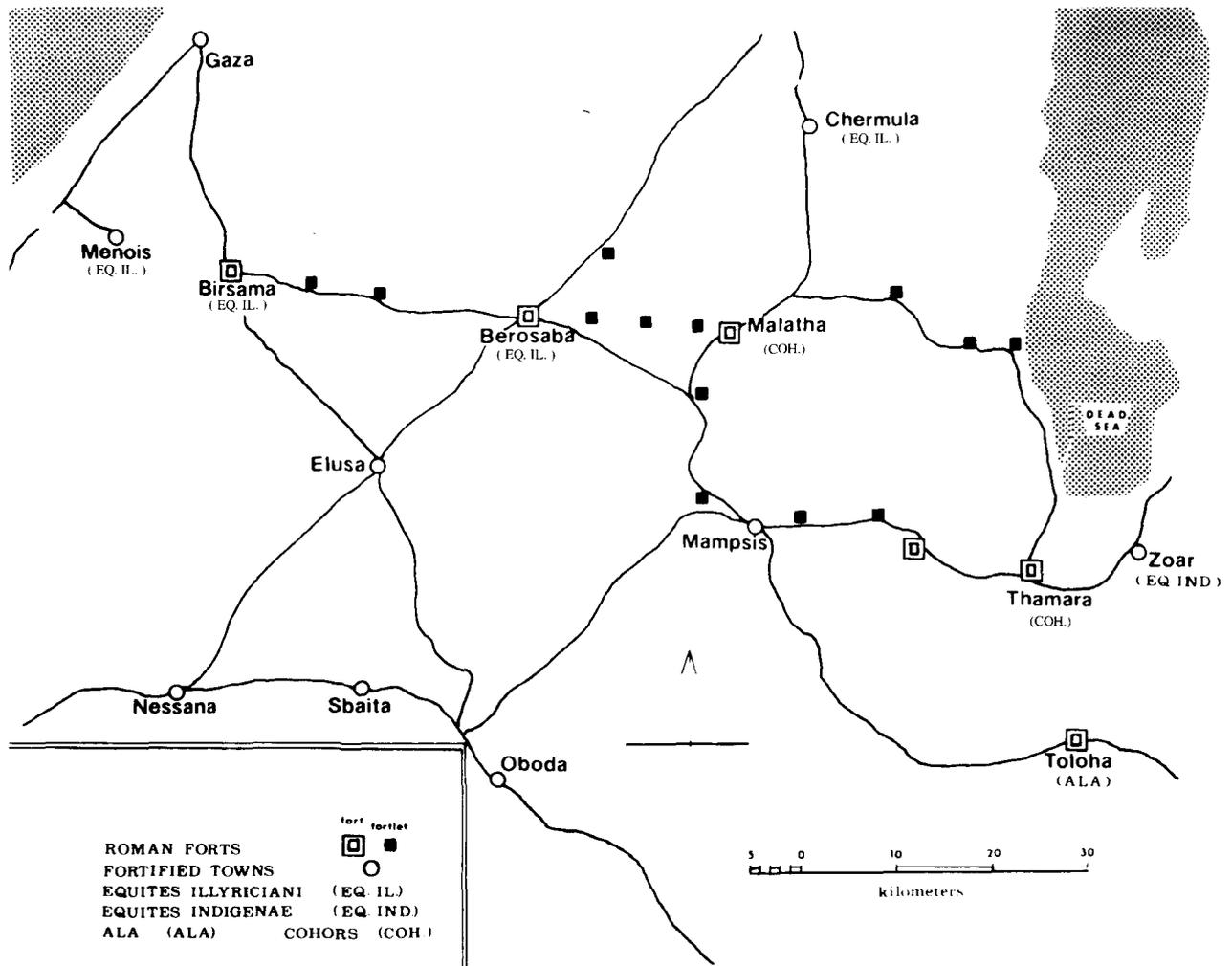


Fig. 7. Map of southern Palestine showing sites identified as limes forts, including 'Ein Boqe' and Upper Zohar. From S. T. Parker, *Romans and Saracens: A History of the Arabian Frontier* (ASOR Dissertation Series 6; Philadelphia: American Schools of Oriental Research, 1986), fig. 54 on p. 141.

Gichon's dating of the five phases is based on the numismatic and ceramic evidence. It is also based on historical considerations, for the fort must have been constructed no later than the fourth century if it is to be associated with the *limes* system established by Diocletian in the region. As I shall demonstrate, there is almost no chronological overlap between the coins and the ceramic types represented at 'Ein Boqe, contradicting Parker's claim that "The basic chronology and phasing is generally supported by the pottery and numismatic corpus."¹⁴ Whereas most of the coins date from the fourth to mid-sixth centuries, almost all of the pottery types date from the mid-sixth to seventh centuries. However, the presence of coins dating to the first half of the sixth century beneath the earliest occupation phase means that the numismatic and ceramic evidence agree in indicating a mid-sixth century construction date for the fort. This is apparent from the following analysis of the ceramic and numismatic material.

14. Parker, "En Boqe' and Upper Zohar," 582.

Although in the final report the sherds are published by type instead of by locus or assemblage, the fact that the provenience of each illustrated sherd is provided makes it possible to reconstruct the assemblages by phase in each room. Most of the pottery comes from the towers and from the rooms inside the courtyard. In addition, Gichon provides lists of the pottery types found in each room and tower by phase.¹⁵ A reconstruction of the ceramic assemblages based mainly on the illustrated examples contradicts Gichon's proposed chronology. All of the types (imports and local wares alike) published from the main occupational phases represent a fairly homogeneous corpus dating from the mid-sixth through seventh centuries. Though some have a range beginning in the fifth century (such as the Late Roman "C" Ware Form 3 bowls and some of the cooking pots), types of clearly fourth- to fifth-century date are conspicuously absent.

Most important are the types represented from "below Phase I" contexts (unter I), which provide a *terminus post quem* for the construction of the fort. These include Cypriot Red Slip Ware Form 9 bowls (pl. 35:22), dated from ca. 550 to the end of the seventh century and Late Roman "C" Ware Form 3 bowls (pl. 30:38), dated mainly to the second half of the fifth and first half of the sixth centuries,¹⁶ large "candlestick" lamps (pl. 45:3), dated from the mid-sixth to late seventh centuries,¹⁷ and Coptic painted jars from Egypt (pls. 29:2–3).¹⁸ The other local, less chronologically diagnostic types also fit comfortably within a sixth to seventh century range.¹⁹

These same types recur in all five phases. The relative frequency of Late Roman "C" Form 3 bowls suggests to me that the lifetime of this type should be extended at least to the end of the sixth century.²⁰ The first example of Fine Byzantine Ware, the rim of a jug, appears in Phase I (pl. 29:20).²¹ The first examples of Late Roman "C" Ware Form 10 bowls (pl. 30:8), Fine Byzantine Ware bowls decorated with an incised wavy line (pl. 36:11), and wheelmade ("Persian") oil lamps (pl. 45:15) appear in Phase II.²² The base of a bowl of African Red Slip Ware stamped with a human head (pl. 46:19), dated ca. 530–600, comes from the same phase, as does the base of a Late Roman "C" Ware bowl stamped with a cross (pl. 46:12).²³ Egyptian Red Slip "A" Ware also appears in Phase II (pl. 35:32–33).²⁴ A conspicuously large number of

15. The published type lists do not always correspond with the illustrated pottery; for example, the Cypriot Red Slip Ware Form 9 bowl rim in pl. 35:22 is not listed among the pottery from "below Phase I" (unter I) in Room 6 (Gichon, *En Boqeq: Ausgrabungen in Einer Oase*, 90); the large "candlestick" lamp in pl. 45:3 is not listed among the pottery from "below Phase I" (unter I) in Room 4 (*ibid.*, 71); only one of the two sherds illustrated from "below Phase I" (unter I) in Room 9 (pls. 43:35; 44:35) is listed from this phase in that room (*ibid.*, 81); the lamp in pl. 45:12 is not listed among the pottery from Phase I in Room 8 (*ibid.*, 79). For this reason I rely here mainly on the illustrated pottery.

16. See Hayes, *LRP*, 379–82, 329–38.

17. Magness, *JCC*, 253, Oil Lamps Form 3B.

18. For this motif, see Egloff, *Kellia*, pl. 64, dated 390–500; Gempeler, *Elephantine X*, 119–20, Form T508, dated probably from the second half of the 7c to 8c.

19. For example, the cooking pots in pls. 39:53 and 42:41 = Magness, *JCC*, 219–20, Cooking Pots Form 4, dated 5c/6c to late 7c/early 8c; the wishbone handle of a casserole in pl. 43:44 = Magness, *JCC*, 213, Casseroles Form 2, dated 6c–7c. The Gaza amphora in pl. 19:29 looks 6c in date; see Majcherek, "Gazan Amphorae," Forms 3–4.

20. See pls. 30:18–57; 31:1–20. Though it is possible that these pieces are residual, I have noticed that this type is common at other sites in Israel in contexts dating to the second half of the 6c and later. See also the discussion of the pottery from Upper Zohar below.

21. See Magness, *JCC*, 236–41, FBW Jars, Jugs and Juglets Form 2, dated mid–6c to late 7c/early 8c.

22. For pl. 30:8, see Hayes, *LRP*, 343–46, dated late 6c/early 7c to mid–7c; for pl. 36:11, see Magness, *JCC*, 193–94, FBW Bowls Form 1A, dated mid–6c to late 7c/early 8c; for pl. 45:15 see *ibid.*, 129, dated 6c–7c.

23. See Hayes, *LRP*, 268, number 247 = Style E(ii); 367, Motifs 71–72 = Group III, dated ca. 470–580.

24. Similar to *ibid.*, fig. 85:h; from the verbal description, the bowl in pl. 35:16 appears to be African Red Slip Ware Form 104 rather than Egyptian Red Slip "A," as it is identified.

rim fragments of Cypriot Red Slip Ware Form 9 bowls are represented from the Northwest Tower in Phase III, with a smaller, residual amount from the same tower in Phase IV.²⁵ A number of Late Roman “C” bowl bases stamped with crosses also come from Phase III (pl. 46:1–8), with two residual pieces from Phase IV (pl. 46:9–10).²⁶ Egyptian Red Slip “C” Ware first appears in Phase IV (pl. 35:41).²⁷ The presence of a type of bowl dated from the mid–seventh century to the ninth–tenth centuries in a context described as “above Phase IV” (über IV) in Room I provides a mid–seventh-century terminus post quem for this phase (pl. 36:3).²⁸ The storage jar with a swollen neck from a Phase V context has a chronological range from the late seventh century to ninth or tenth centuries (pl. 18:19).²⁹ The latest types represented at the site date to the eighth to tenth centuries. They include examples of deep, hemispherical cups or bowls (pl. 36:6–7) from a context “above Phase V” (über V) in Room 8, and three pieces of moldmade, buff ware (“Mefjer ware”) jugs (pl. 29:11–13).³⁰

Thus, the ceramic evidence indicates that the five main occupation phases at ‘Ein Boqeq date from the mid–sixth through seventh centuries. The dates of each phase can be suggested on the basis of the latest types illustrated from each. The Cypriot Red Slip Ware Form 9 bowls and large “candlestick” lamps from under Phase I contexts, and the FBW jug from Phase I, provide a mid–sixth-century terminus post quem for the construction and initial occupation of the fort. I suggest assigning Phase I to the third quarter of the sixth century. The Late Roman “C” Ware Form 10 bowl from Phase II points to a date in the late sixth to early seventh century for this phase. Though there are no later datable types published from Phase III contexts, from its position in the sequence it should be placed in the the first quarter of the seventh century, perhaps continuing into the second quarter of the seventh century. The Egyptian Red Slip “C” Ware bowl from Phase IV indicates that this phase should be assigned to the second and third quarters of the seventh century. This appears to be confirmed by the FBW Form 2C bowl of mid–seventh century to ninth- or tenth-century date from a context “above Phase IV” (über IV). The storage jar with swollen neck points to a late-seventh-century (last quarter of the seventh century) date for Phase V. Though some of the types from these phases, such as this storage jar continue well beyond the seventh century, the absence of clearly later types suggests that the main occupation of the fort came to an end some time in the late seventh to early eighth centuries. The only clearly post–seventh-century ceramic types (the deep, hemispherical FBW bowls and the “Mefjer ware” jars) apparently reflect a very limited reoccupation in the Abbasid period.

How does the numismatic evidence correlate with the ceramic evidence? Of the 588 coins recovered in the excavations, only 42 (7.2%) were closely datable. The vast majority are small bronze coins that were

25. Phase III: pls. 32:9, 10, 12, 23, 25, 27, 28, 30; 33:1, 3, 6, 7, 8, 9, 16, 18; 34:1, 3, 10, 11, 12, 13, 14, 17, 20; 35:3, 5, 8, 9, 10, 11, 12, 13, 14, 18, 20, 21; Phase IV: pls. 32:8, 16, 20, 22, 24, 29, 31; 33:4, 5, 10, 11, 15; 34:4, 8, 9, 19; 35:2, 5, 6, 7. See *ibid.*, 378–82.

26. See *ibid.*, 364, Motifs 67–68 = Group III, dated ca. 470–580. Note too the base of a bowl of the same ware stamped with a running stag from a Phase III context in pl. 46:20; see *ibid.*, 358, Motif 41 = Group III, dated ca. 470–580.

27. See *ibid.*, 399–401, fig. 89:a, dated ca. 620 to 700 or later; the other examples of this ware, illustrated in pl. 35:40, 42–43 come from the “uppermost levels” (Oberschichten).

28. See Magness, *JCC*, 200, FBW Bowls Form 2C.

29. *Ibid.*, 230–31, Storage Jars Form 7.

30. For the bowls, see *ibid.*, 196, FBW Bowls Form 1E, dated 8c–9c; for the buff ware jugs, see Avissar, “The Medieval Pottery,” 158–59, Type 6, dated Abbasid or later. All three buff ware fragments are recorded as coming from Phase III–IV contexts in the Southwest Tower; see Gichon, *En Boqeq: Ausgrabungen in Einer Oase*, 296. In light of their late date and the fact that 8c–10c material appears to be rare at ‘Ein Boqeq, these pieces must be intrusive or from a disturbed context. Perhaps they come from the hearth or fireplace dug into the destruction debris in the middle of the Southwest Tower, which can be seen in the Phase IV plan of the site (Plan 5), and apparently cut down to the Phase III level (as seen in Plan 4).

too corroded to be read. Many others are simply identified as “Late Roman,” based on their size and weight. The identifiable coins range in date from ca. 341–46 to the time of Justinian I (527–65).³¹ This led Gichon to conclude that the fort was established in the first half of the fourth century, and on this basis he created the chronological framework for his phases.³² However, the following chart, which presents the identifiable coins according to phase, reveals that Gichon’s chronology is incorrect.³³

- Unter I: 1 × 4c; 22 × LR (Late Roman); 1 × Justin I; 1 × Justinian.
 I: 1 × Constantine II; 1 × Valens; 17 × LR.
 II: 1 × Constantine I; 1 × Theodosius I; 2 × Arcadius; 5 × 4c; 8 × LR 4c–5c; 12 × LR.
 Über II–Unter III: 1 × Constantine I; 2 × LR; 1 × Justin I.
 III: 4 × 4c; 8 × LR 4c–5c; 13 × LR 5c; 61 × LR; 3 × Justin I; 2 × Justinian I.
 Über III–Unter IV: 7 × LR 5c; 5 × LR.
 IV: 9 × LR 4c–5c; 5 × LR 5c; 28 × LR; 1 × LR–Byz; 5 × Byz 6c; 2 × Anastasius or Justin I;
 1 × Justin I; 1 × Justinian I.
 Über IV–Unter V: 2 × LR 5c.
 V: 27 × LR; 1 × Justinian I; 1 × Byz.

Several points of interest emerge from this review. First, there is no clear chronological sequence; coins of fourth- to mid-sixth-century date are distributed throughout all the phases. Second, and more important, is the presence of coins of Justin I and Justinian I in “below Phase I” (unter I) contexts.³⁴ These coins provide the same mid-sixth-century terminus post quem for the construction of the fort as the pottery. In other words, the ceramic and numismatic material are in perfect agreement regarding the construction date of the fort. Third is the puzzling composition of the numismatic corpus, which so misled Gichon and Parker. Since all of the identifiable coins antedate the mid-sixth century, none is contemporary with the occupation of the fort! The fact that these are small bronze issues of little value makes it difficult to understand why they should have remained in circulation for so long, or even have been brought to the site at all. Similar anomalies in the coin records of synagogues sites in the Golan suggest that this may be a widespread phenomenon in sixth-century Syria–Palestine. In fact, large quantities of tiny *minimi* apparently remained in circulation in sixth-century Palestine, even after the reform of Anastasius I. They were

31. There are also one coin of Agrippa I, one Nabataean coin, one 7c Umayyad coin and one of the 12c; see A. Kindler, “Die Münzen und Katalog der Münzen,” in Gichon, *En Boqeq: Ausgrabungen in Einer Oase*, 400, nos. 1–2; 428, nos. 584–85. Except for these, all of the closely datable coins range from the second quarter of the 4c to the mid-6c (see n. 33 below).

32. *Ibid.*, 397–428; Gichon, *En Boqeq: Ausgrabungen in Einer Oase*, 50–52.

33. In this chart, I indicate the number of identifiable coins in each phase, following the terminology employed by Kindler, “Die Münzen.” Hence, “LR” is short for “Late Roman,” and some of the LR coins are further identified by century, e.g. 4c, or 4c–5c. In an electronic mail communication dated 5 January 1998, Donald T. Ariel commented as follows on the coins from ‘Ein Boqeq (based on the published evidence rather than on first-hand inspection), “The best I can reconstruct, there are two coins of 341–346 [3–4], one of 351–361 [5], one of 364–375 [6], seven of 383–392 [7–8, 16–20], seven of 425–455 (cross within wreath, or perhaps it should be 395–455, cross with or without wreath) [9–15], one of 450–457 [73], and two of 457–474 [74–75]. Now there are also twenty-six coins [47–72] for which my best guess would be to correct the date to 364–395 (as the fifth century seems unlikely to me, for a number of reasons). . . . All of the fourth-century coins could have arrived at the site in the fifth century, and been current there. The ‘proper’ fifth century coins while usually scarce, are found in not insignificant numbers.” According to Ariel, if one rejects the published stratigraphic sequence, the numismatic evidence could be understood as indicating that occupation began in the fifth century. I am grateful to Mr. Ariel for his thoughtful and detailed comments on this point and on others below.

34. *Ibid.*, 421 (coin no. 554, of Justin I, dated 518–27, from Room 8); 424 (coin no. 564, of Justinian I, dated 527–65, from Room 8).

used in bulk as small change, carried in sealed purses bearing their value or weight on the outside.³⁵ Another possible factor to consider is M. Crawford's observation that, although high-value coins traveled quickly to rural areas, low-value bronze issues often lagged far behind in terms of distribution. This is because small, recurrent purchases were not a feature of the rural lifestyle. To illustrate this, Crawford describes a villa near Capua that was occupied for a short time during the late Republican and early Imperial period. Of the thirty coins from its occupation levels, only one dated from the period of occupation; the rest were all struck 50–100 years before occupation began.³⁶ However, since 'Ein Boqe'q was a military rather than a civilian site, the numismatic profile may reflect irregularities in the soldiers' pay.³⁷

Upper Zohar

The fort at Upper Zohar (Arabic Kh. Ghazza) is situated on a plateau to the southeast of Arad, on a steeply sloping ridge between two wadis on the northern side of a hill known as Rosh Zohar. The fort apparently served as a lookout station and police post to protect caravans and pilgrim groups traveling along a Roman–Byzantine road that descended down to the 'Arabah. At least two more forts guarded this road: a still unexcavated fort called Hatrurim about 8 km east of Upper Zohar and the one at 'Ein Boqe'q. The site was excavated in 1985–86 by R. P. Harper on behalf of the British School of Archaeology in Jerusalem.³⁸

Like 'Ein Boqe'q, the fort at Upper Zohar is a *tetrapyrgos*, measuring ca. 17 × 17 m with projecting towers (ca. 4 × 4.5 m) at each corner and a single gate in the western side. Although there is some evidence for the existence of an upper storey in the towers, the absence of roofing materials indicates that the towers may have been tented over. Initially there were three rooms along the eastern side of the courtyard, but at some point the northern and southern ones were leveled, leaving only the central room. Its carefully maintained white plaster floor and bench against the south wall suggest that it was used as a chapel. A cistern was dug into the bedrock just to the north of the center of the courtyard.

Layers of occupation debris had accumulated above the floors, which consisted either of plaster or the natural bedrock. These were covered by the stone collapse of the walls and towers. Instead of having a unified phasing sequence, the occupation levels in each room are described separately from top to bottom,

35. See G. Bijovsky, "The Gush Halav Hoard Reconsidered," *'Atiqot* 35 (1998) 84. For the weighing of small bronze coins in bulk in early Islamic Egypt, see M. L. Bates, "Coins and Money in the Arabic Papyri," in Y. Rāḡib (ed.), *Documents de l'islam médiéval: Nouvelles perspectives de recherche* (Cairo: Institut français d'archéologie orientale, 1991) 43–64. I am grateful to Todd Hickey for bringing this reference to my attention. For the coins from the Golan synagogues, see D. T. Ariel, "Coins from the Synagogue at Horvat Kanef," *Israel Numismatic Journal* 4 (1980) 59–62 (especially p. 60: "No coins definitely representing the occupational period of the synagogue have yet been found"); idem, "Coins from the Synagogue at 'En Neshut," *Israel Exploration Journal* 37 (1987) 147–57; idem, "Coins from the Synagogue at Dabiyye," *'Atiqot* 20 (1991) 74–80; idem, "A Hoard of Byzantine Folles from Qazrin," *'Atiqot* 29 (1996) 69–76. At these sites, however, many of the coins come from deposits or "hoards" in the foundations and beneath the floors of the synagogues, instead of from the occupation levels, as at the forts examined here.

36. M. Crawford, "Money and Exchange in the Roman World," *Journal of Roman Studies* 60 (1970) 40–48.

37. For example, Parker, "En Boqe'q and Upper Zohar," 585, cites Procopius's assertion that Justinian demobilized many of the eastern *limitanei* by stopping their pay. For a detailed discussion of this problem in light of the numismatic evidence, see P. J. Casey, "Justinian, the *limitanei*, and Arab-Byzantine Relations in the 6th c.," *Journal of Roman Archaeology* 9 (1996) 214–22, which indicates that Justinianic issues postdating 527–38 indeed seem to be rare or unattested at sites in Palestine. However, the evidence presented in this paper for 'Ein Boqe'q and Upper Zohar contradicts Casey's conclusion, based partly on Parker's fieldwork, that by the end of the sixth century "little remained of the formal system of border control" in southern Palestine (*ibid.*, 222).

38. See R. P. Harper, *Upper Zohar. An Early Byzantine Fort in Palaestina Tertia: Final Report of Excavations in 1985–1986* (Oxford: Oxford University Press, 1995).

for example, “sandy rubble,” “sandy burnt,” and so on. Though in some places such as the Northwest Tower the burning seems to be localized and may represent hearths or fireplaces, the presence of levels described as “burnt” or “ashy” throughout the fort suggests that it suffered at least one or two destructions by fire during the course of its occupation. The discovery of the skeleton of a 7- to 8-year-old child, who was crushed inside the tower when it collapsed, indicates that the final destruction of the fort was caused by an earthquake.³⁹

The ceramic and numismatic material from Upper Zohar is remarkably similar to that from ‘Ein Boqeq. Most of the 607 coins recovered were not closely datable. They include 133 Ae4 issues dated ca. 350–450 and 379 nummi dated ca. 450–550. The 42 closely datable coins range from the late fourth century to the first half of the sixth century. There is a significant increase in coinage of the first half of the sixth century, with 24 issues of Justin I and Justinian I. All of the precisely dated issues of Justinian date early in his reign (527–40).⁴⁰ Although Harper noted that the distribution of coins by period suggests occupation in the first half of the fifth century, based on the ceramic evidence he dated the occupation of the fort from the late fifth to early seventh centuries: “The datable pottery was nearly all of the sixth century with a few examples from the late fifth or of types continuing into the early seventh century. No earlier or later forms were present.”⁴¹ To account for the discrepancy between the dates proposed by the respective excavators for the forts at ‘Ein Boqeq and Upper Zohar, Parker has suggested that the latter was initially constructed and occupied before the late fifth century, and that these remains were obliterated when the military occupation ceased and the fort was cleaned out in the early to mid-sixth century. After that, the fort was used for other purposes (perhaps by travelers) and gradually filled with debris until it was abandoned in the early seventh century.⁴² As will be seen, this suggestion is not supported by the archaeological evidence. Conversely, Harper suggested that the date of the fort at ‘Ein Boqeq should be revised to bring it into line with his dating of the fort at Upper Zohar. However, his proposed late-fifth-century construction date for both forts is still too high.⁴³

Although the ceramic material from Upper Zohar is published by type, it is possible to reconstruct the assemblages, because the provenience of each illustrated piece is provided, and all of the finds from each locus are listed (coins, pottery, lamps, glass, and small finds).⁴⁴ Because much of the material comes from accumulations above the earliest floors, which were made either of bedrock or poorly preserved plaster, it

39. Harper, *Upper Zohar*, 6.

40. *Ibid.*, 15–20. In his communication (n. 33 above), Ariel, who examined and registered the coins from Upper Zohar for the Israel Antiquities Authority, commented as follows, “As for the earlier well dated coins I found only one in the 383–92 range and one in the 383–95 range. Then there are two or three cross types, from roughly the first half of the fifth century. So on the basis of the coins it is reasonable to suggest only a second half of the fifth century date for the beginning of Upper Zohar. . . .” According to Ariel, two of the coins of Justinian I actually date to 537–39, and to 539/540, respectively. He notes that “the absence of later large Justinian I coins (and even more common later coins)” is significant; also see n. 37 above.

41. Harper, *Upper Zohar*, 115.

42. Parker, “En Boqeq and Upper Zohar,” 585.

43. Harper, *Upper Zohar*, 115.

44. Flow charts (or a Harris Matrix) would have assisted in reconstructing the sequence in each excavated area, as would the provision of locus lists (for example, 23.12, which is described in Harper, *Upper Zohar*, 10, as a plaster floor in one of the internal rooms, is not discussed in the summary of this area on p. 9 and does not appear in the section in fig. 8. Thus, its relationship [and that of the diagnostic pottery associated with it] to the rest of the sequence cannot be determined). There are also some inconsistencies or errors in the correlation between the illustrated and listed pottery; for example, the cooking pot found crushed in the Northeast Tower is illustrated on pl. 29, not pl. 25 (p. 3); the m/m lamp fragment from 01.2 listed on p. 5 is illustrated in fig. 19.7, not 19.15; the lamp fragment illustrated in fig. 20.26 is not listed among the pottery from 23.8 (p. 10); the ARS 107 sherd listed from 23.7 on p. 9 is not illustrated in fig. 8.13.

is difficult to isolate sealed deposits associated with the initial construction and occupation of the site. As Harper noted, however, the pottery found throughout the site, even in the internal construction trenches of the walls of the towers, constitutes a homogeneous assemblage.⁴⁵ I was able to identify only three areas with published deposits associated with the initial occupation of the site. The first are loci 01.5 and 01.6 in the Northwest Tower, which are described as “the lowest group of deposits . . . in the offsets between the walls, lying in the scoop of the wall foundation trench.”⁴⁶ The second is a sandy, burned layer (31.7) described as the “earliest occupation” in the Northeast Tower.⁴⁷ The third is the internal buildings in the courtyard, where fragmentary traces of the initial occupation and of a plaster floor are described in the southern room.⁴⁸ Locus 23.9, which is the earliest floor both listed in this room and illustrated in the section in Figure 8, contained no pottery or coins. However, “plaster floor” 23.12, which seems to be early, yielded one nummus and two diagnostic bowl rims (African Red Slip Ware Form 107, and Cypriot Red Slip Ware Form 9A; see below). The coins listed from these loci include a nummus of Honorius (393–395), two coins of Leo I (457–474), one coin of Zeno (fifth century), and two nummi of the fifth to sixth century. The pottery includes Late Roman “C” (Phocean Red Slip) Ware Form 3, dated from the second half of the fifth to first half of the sixth centuries, Late Roman “C” (Phocean Red Slip) Ware Form 10C, dated from the early to mid–seventh century, African Red Slip Ware Form 107, dated to ca. 600–650, and Cypriot Red Slip Ware Form 9A, dated to ca. 550–600.⁴⁹ The closely datable local types from these loci include a Fine Byzantine Ware jug (fig. 12.40) and a fragment of a large “candlestick” oil lamp (fig. 20.27), both dated from the mid–sixth to late seventh centuries (fig. 12.40).⁵⁰ Since this assemblage comes from unsealed deposits associated with the earliest occupation and includes types that did not appear before the beginning of the seventh century, it provides an early-seventh-century terminus ante quem for the construction of the fort. The homogeneity of the ceramic corpus from Upper Zohar is striking. As at ‘Ein Boqeq, though some of the types have ranges extending earlier or later, almost nothing has to antedate the sixth century. In fact, except for the Late Roman “C” (Phocean Red Slip) Ware Form 3 bowls, virtually all of the closely datable imported and local wares at both sites postdate the mid–sixth century.⁵¹ On the other hand, the absence of certain types from the Upper Zohar corpus suggests that occupation ended by the mid–seventh century (that is, before Phase V at ‘Ein Boqeq).⁵² There is also no evidence at Upper Zohar for the Abbasid presence attested at ‘Ein Boqeq.

The ceramic and numismatic evidence thus indicates that the forts at Upper Zohar and ‘Ein Boqeq were constructed and initially occupied around the middle of the sixth century. Like ‘Ein Boqeq, the fort at Upper Zohar may have suffered at least one or two destructions by fire during its existence. The final destruction, however, was apparently caused by an earthquake. The absence of evidence for occupation, including the rarity of whole vessels found crushed in the collapse, suggests that the earthquake may have

45. *Ibid.*, 115.

46. *Ibid.*, 4.

47. *Ibid.*, 7.

48. *Ibid.*, 8–10.

49. For the dating of these types, see Hayes, *LRP*, 329–38 (LRC 3); 343–46 (LRC 10); 170–71 (ARS 107); 378–82 (CRS 9A).

50. See Magness, *JCC*, 239–41, FBW Jars, Jugs, and Juglets Form 2B, especially number 1; 251–52, Oil Lamps Form 3A.

51. There are a few sherds of pre-6c date at both sites; for ‘Ein Boqeq, see Gichon, *En Boqeq: Ausgrabungen in Einer Oase*, pl. 35:36 (ARS Form 97, dated ca. 490–550; see Hayes [above, n. 16] 150–51); for Upper Zohar, see Harper, *Upper Zohar*, 21, for bowl fragments of mid-to-late 5c date (ARS Forms 91 and 93, and LRC Form 3C).

52. The types represented at ‘Ein Boqeq, which postdate the mid-7c, are not attested at Upper Zohar; for example, the Fine Byzantine Ware Bowl Form 2C, which dates from the mid-7c to 9c/10c, and the storage jar with swollen neck, which dates from the late 7c to 9c/10c (see nn. 28–29 above).

occurred after the fort was abandoned.⁵³ The fact that the only human victim found was a child with no possessions suggests that the fort was being used as a temporary shelter by shepherds or Bedouin at the time the earthquake struck. The entire occupational sequence at Upper Zohar should be dated within range of 100 years or less, from the mid-sixth century at the earliest to the mid-seventh century at the latest.

The Eastern Mount Hebron Sites

During the late 1970s, Y. Hirschfeld surveyed a series of sites along the north-south road at the edge of the Judean desert, on the top of the Mount Hebron ridge between Teqo'a on the north and the Lucifar police station on the south. On the basis of this survey and small-scale excavations, he proposed redating these sites from the time of the Bar Kokhba Revolt (second century C.E.) to the fourth century, and identified them as forts belonging to the *limes Palaestinae*.⁵⁴ According to Hirschfeld, these forts were established to create a line of defense against nomadic incursions. More recent surveys and excavations have indicated that the chronology and function of these sites, and hence their relationship to the *limes*, need to be reevaluated. Since much of the literature has never been published in English, this discussion begins with a general description of the relevant sites.

*The Sites Surveyed by Hirschfeld*⁵⁵

(1) Ma'aleh Reches Kanub (the Kanub Ridge Ascent; no. 2 on Hirschfeld's map). This is a small, rectangular structure measuring 4.5 × 5.0 m, located about $\frac{1}{3}$ of the way up the steep Kanub Ridge Ascent. There is a courtyard in front supported by a retaining wall. From here the road continues up the ascent to the top of the plateau above. Hirschfeld also noted traces of an ancient road along the top of the ridge, lined by piles of stones from the clearing of the road (no. 3 on his map).⁵⁶

(2) Rujm el-Qasr (no. 6 on Hirschfeld's map). According to Hirschfeld, this impressive structure must have served as the central military base for the area north of Tel Ziph. The complex includes a fortified tower, ancillary rooms, and a water pool in a rectangular courtyard enclosed by a wall. The most prominent feature is the fortified, two-storey high square tower (8.2 × 8.8 m), which is surrounded by a sloping stone glacis. The interior of the tower is divided into two wings by a low partition wall with piers, creating a "window wall." The tower is set into one side of a wall that encloses a rectangular courtyard (28.2 × 27.0 m). Rooms along the south side of the courtyard were apparently used as dwellings and for storage. The corbel-vaulting and "window wall" inside the tower and its sloping stone glacis are described by Hirschfeld as characteristic of architecture in Syria and the Hauran in the fourth to sixth centuries.⁵⁷

53. See the cooking pot in Harper, *Upper Zohar*, pl. 29.

54. See Hirschfeld, "A Line of Byzantine Forts"; A. Kloner and Y. Hirschfeld, "Khirbet el-Qasr: A Byzantine Fort with an Olive Press in the Judean Desert," *Eretz-Israel* 19 (Avi-Yonah Volume; 1987) 132–41 (in Hebrew, with English summary). These are now cited as examples of *limes* forts; for example, see Isaac, *The Limits of Empire*, 184–85, and n. 12; Tsafir et al., *Tabula Imperii Romani*, 207, s.v. "Kh. el Qasr" ("Roman-Byzantine fort, later monastery, in the Judean Desert"); 217, s.v. "Rujm el Hamiri" ("Fort, burial cave, in southern Judaea"); 217, s.v. "Rujm el Qasr" ("Fourth century fort in the Judean Desert").

55. The description of sites 1–9 is based on Hirschfeld, "A Line of Byzantine Forts," with the number of the site as indicated on his map in parentheses. The description of the last site (10) is based on Kloner and Hirschfeld, "Khirbet el-Qasr." These are my summaries of the Hebrew publications. I have translated the Hebrew term *har Hevrôn* literally as 'Mount Hebron' or 'Hebron mountains' instead of 'Hebron hills', as it is sometimes rendered.

56. Hirschfeld, "A Line of Byzantine Forts," 80.

57. *Ibid.*, 80–81.

(3) Qasr Khalifah (no. 7 on Hirschfeld's map). This structure consists of a fortified tower (measuring ca. 8.1×8.1 m) on the western side of a rectangular courtyard. The tower's interior is divided into two wings by a "window wall." The plan, scale, and construction technique of this structure are similar to Rujm el-Qasr.⁵⁸

(4) The structures at Ras Jirjis (no. 8 on Hirschfeld's map). The main structure here is located at the top of Ras Jirjis, which is one of the highest points on the ridge enclosing the Beit 'Anun Valley to the east (1,010 m above sea level). The line of the road passes to the south of the summit, on a narrow spur between it and the top of Ras Abu Rish. The complex consists of a rectangular forecourt on the east (measuring 8.8×12.0 m) and a fortified, two-storey high tower (7.0×8.8 m) on the west. As at Rujm el-Qasr, the interior of the tower is divided into two wings by a "window wall." This site has visual contact with the others along this road. A second, square structure (6.7×6.7 m) is located nearby, by the road at the foot of Ras Jirjis. According to Hirschfeld, the ceramic material from a small sounding at this site indicates that it belongs to the same group of forts as the others described here.

Several walls are built up against the eastern side of the Ras Jirjis site. Pottery, agricultural installations, and mosaic tesserae attest to its reoccupation later in the Byzantine period. There is an intersection about 300 m to the west of these two structures, with one road branching off to the south, toward the village of Bani Na'im. No more sites were found between this point and the next.⁵⁹

(5) 'Ein el-Biryein (no. 11 on Hirschfeld's map). This almost square (4.0×4.6 m) structure is located about 200 m southwest of 'Ein el-Biryein, on the edge of a spur overlooking the spring, guarding the eastern approach to Hebron. Several sections of road were discovered to its south, as indicated by piles of stones.⁶⁰

(6) The structure at the summit of Tel Ma'on (no. 13 on Hirschfeld's map). This overlooks the entire southern region of Mount Hebron and has visual contact with the important site of Rujm el-Hamiri (see below). It has the same design as the other structures described here: it is rectangular (9.3×10.3 m) and is divided by an east-west wall into two wings. A doorway leads into the northern wing, on the eastern side of which was a lookout tower. The southern wing was apparently used for dwelling purposes.⁶¹

(7) Rujm el-Hamiri (no. 14 on Hirschfeld's map). This is Rujm el-Qasr's "big sister." It includes a fortified tower with ancillary rooms surrounding a rectangular courtyard (29.0×42.8 m). The rectangular tower (8.8×10.5 m) resembles the one at Rujm el-Qasr in plan, size, and in the presence of a sloping stone glacis around its exterior. Though the interior of the tower has collapsed, it appears to have been divided into two wings and was roofed by corbel vaulting like the other towers. The ancillary rooms surrounding the interior of the courtyard on the north, east, and west sides suggested to Hirschfeld that a large garrison was stationed here. He identified the sites of Rujm el-Hamiri and Rujm el-Qasr sites as forts that served as permanent bases for troops defending the *limes*.⁶²

(8) Khirbet e-Tumin (no. 15 on Hirschfeld's map). This structure sits on a spur overlooking the northern and western parts of Mount Hebron. It has visual contact with Rujm el-Hamiri and Tel Ma'on on the one hand, and the structure on the Lucifar Ridge on the other (see no. 9 below). The plan is similar to that of the upper structure at Ras Jirjis (no. 8 on Hirschfeld's map); it is rectangular (6.7×14.5 m), and has a northern forecourt and rectangular tower (6.2×6.7 m) on the south. Although this structure was identified by Hirschfeld as a fort and was associated with the Byzantine fortification system on the basis of its archi-

58. *Ibid.*, 81.

59. *Ibid.*, 81–82. When Hirschfeld refers to evidence for later Byzantine reoccupation on the eastern side of the Ras Jirjis site, he seems to mean the first structure, at the top of the hill.

60. *Ibid.*, 82.

61. *Ibid.*

62. *Ibid.*, 82–83.

ture and its orientation toward the north, he noted that it could represent a fortified farmstead like others found along this road (see no. 10 on Hirschfeld's map).⁶³

(9) Banag 912 (no. 16 on Hirschfeld's map). This is located at the highest point on the Lucifar Ridge (Kanan el-ʿAsir), overlooking southern Mount Hebron, the Judean Desert, the Arad Valley, and the northern Negev. Unlike the others, it is a simple rectangular structure (9.4 × 13.3 m).⁶⁴

(10) Khirbet el-Qasr. This complex is described in a separate article by A. Kloner and Hirschfeld, who surveyed the site and carried out limited soundings.⁶⁵ It is located next to the road that descends from Hebron to ʿEin Gedi, about 3 km southeast of Bani Naʿim. Khirbet el-Qasr's location further to the east of the main north-south road than the other sites led Kloner and Hirschfeld to suggest that it was a fort that protected both the Hebron-ʿEin Gedi road and the Byzantine monasteries in the vicinity. It consists of two main elements: a fortified tower and a courtyard. The square tower (11.2 × 11.0 m) is surrounded by a sloping stone glacis that measures 18 × 18 m at its base. The interior of the tower is divided into two wings as at Rujm el-Qasr and Rujm el-Hamiri. The tower sits on the western side of the rectangular courtyard (42.5 × 33.5 m). An olive press with a large round crushing stone and pressing installation was found on the southern side of the courtyard. Kloner and Hirschfeld noted that this kind of installation, in which a large screw between two tall stones was used to press the baskets of crushed olives, is typical of the Byzantine period. They associated it with a secondary occupation of the site late in the Byzantine period, after the structure was no longer used for its original military purpose. Other secondary walls found in the courtyard, as well as some white tesserae and a stone lintel decorated with three crosses also belong to this later occupation. Kloner and Hirschfeld concluded that the site must have been used as a monastery or farmstead after it ceased to function as a fort.

Hirschfeld's Chronology and Interpretation of the Eastern Mount Hebron Sites

According to Hirschfeld, the soundings he carried out at Rujm el-Qasr and in the two structures at Ras Jirjis yielded similar and contemporary ceramic material. No pottery was found that antedates the fourth century, either in the excavations or in surface survey, and Byzantine pottery of the fourth to mid-sixth centuries was discovered on the floors of these structures. A few Islamic sherds found on the surface and in the uppermost levels indicate that they went out of use after the Muslim conquest.⁶⁶ Hirschfeld suggested, however, that some portions of this road were in use before the fourth century. Since the southern segment (from Tel Ziph to Maʿaleh Dragot) was part of the main artery connecting Jerusalem with Aila (modern ʿAqaba) via Hebron, Malatha, and Mampsis (Mamshit, Kurnub), it was probably established in the second century C.E., when the Roman Empire annexed Provincia Arabia. The northern segment of the road (from Tel Ziph to Teqoʿa), which continues to the east of the main artery, traverses the steep cliffs of valleys that cut through the top of the ridge. Because of this segment's position along the edge of the desert, Hirschfeld suggested that it was used by patrols of the Roman and Byzantine army who were stationed at the sites he surveyed.⁶⁷ Hirschfeld thus interpreted these sites as forts belonging to the *limes Palaestinae*, according to its traditional definition as a continuous line of defense that was established during Diocletian's time. The main military base in the region was located at Chermoula (Carmel). During the course of the Byzantine

63. *Ibid.*, 83.

64. *Ibid.*, 83–84.

65. See Kloner and Hirschfeld, "Khirbet el-Qasr."

66. Hirschfeld, "A Line of Byzantine Forts," 78.

67. *Ibid.*, 78–79.

period, the *limes* system underwent changes in response to new threats along the empire's borders. At the end of the fourth century, during the time of the Theodosian dynasty, the *limitanei* were stationed in large permanent bases, such as the *numerus Theodosiacus*, a camel-mounted cavalry unit mentioned in the Nesana papyri. At the same time a garrison of the *Equites Scutarii Illyriciani* was stationed at Chermoula, as indicated by the *Notitia Dignitatum* (Or. XVIII.20). Hirschfeld associated the establishment of the sites along the eastern edge of Mount Hebron with this phase in the development of the *limes*.⁶⁸ According to him, the main forts in the line were Rujm el-Qasr in the north, Khirbet el-Qasr in the center, and Rujm el-Hamiri to the south, which are characterized by their monumental size and uniform design.⁶⁹ Hirschfeld even suggested that a unit of the *Equites Scutarii Illyriciani* was stationed at Rujm el-Hamiri, because of its size and proximity to Carmel. He viewed these as forts designed to protect traffic along the important artery connecting Jerusalem with Aila via Hebron, Chermoula, Malatha, and Mampsis. The main threat was posed by the nomads (Saracens), the traditional enemies of agriculturalists and villagers. According to Hirschfeld, this line of defense ceased to function by the mid-sixth century, at the latest.⁷⁰

Based on these historical considerations and on the pottery recovered in his excavations and surveys, Hirschfeld dated the establishment of these sites to the late fourth to early fifth centuries. Does the ceramic evidence support his proposed chronology? The only pottery published from these sites consists of 11 sherds whose provenience is not provided. The plate is labeled "Pottery of the fourth to sixth centuries from the forts of Mount Hebron."⁷¹ Although these are line drawings with no descriptions, many of the pieces are easily identifiable. They include examples of Late Roman "C" Ware Form 3, dated mainly from the second half of the fifth to the first half of the sixth century (upper left), African Red Slip Ware Form 67, dated ca. 360–450+ (lower left), two Jerusalem rouletted bowls of sixth-century date (the two pieces in the middle of the right-hand side), and two storage jars characteristic of the sixth century (the two pieces in the middle of the left-hand side).⁷² Another plate of line drawings with no descriptions is published from Khirbet el-Qasr, labeled "Sherds collected at the site and its vicinity."⁷³ The first three pieces date to the Iron Age; the other seven Byzantine pieces are easily identifiable. They include examples of Late Roman "C" Ware Form 3, dated mainly from the second half of the fifth to the first half of the sixth century (no. 7), Late Roman "C" Ware Form 10, dated from the late sixth to mid-seventh century (no. 6), a Jerusalem rouletted bowl of the sixth century (no. 10), arched-rim basins (nos. 8–9), and storage jars characteristic of the sixth century (nos. 4–5).⁷⁴ Thus, most of the pottery illustrated from these sites appears to date to the sixth century. The only piece that must antedate the sixth century is the African Red Slip Ware Form 67 bowl.

68. Ibid.

69. Kloner and Hirschfeld, "Khirbet el-Qasr," 139.

70. Hirschfeld, "A Line of Byzantine Forts," 78.

71. Ibid., 79.

72. For LRC Form 3 see Hayes, *LRP*, 329–38; for ARS Form 67, see *ibid.*, 112–16; for Jerusalem rouletted bowls, see Magness, *JCC*, 187–88, Rouletted Bowls Form 2A; for the storage jars, see *ibid.*, 224–25, Storage Jars Forms 4B–4C.

73. Kloner and Hirschfeld, "Khirbet el-Qasr," 134.

74. For LRC Form 3, see Hayes, *LRP*, 329–38; for LRC Form 10, see *ibid.*, 343–46; for the Jerusalem rouletted bowl, see Magness, *JCC*, 187–88, Rouletted Bowls Form 2A; for the arched-rim basins, see *ibid.*, 204–7, Arched-Rim Basins Forms 1 and 2A (no. 8, which has combing, dates from the 6c to late 7c/early 8c; since not enough of no. 9 is preserved to determine whether it was combed, its range is late 3c/early 4c to late 7c/early 8c); for the storage jars, see *ibid.*, 224–25, Storage Jars Forms 4B–4C.

***New Evidence for the Chronology and Function
of the Eastern Mount Hebron Sites***

Surveys and excavations carried out recently by Y. Barouch and S. Riklin on behalf of the Archaeological Officer of the Israeli military administration in Judea and Samaria have indicated that the sites surveyed by Hirschfeld are not late Roman or Byzantine but instead date to the first century B.C.E.–first century C.E. The results of these new investigations have also called into question the identification of at least some of these sites as forts. Riklin first noted the similarities between a structure that he surveyed at Opharim, near Nablus, and those at Rujm el-Qasr, Khirbet el-Qasr, Rujm el-Hamiri, and other sites in Judea and Samaria (including Qumran). All of these have what he termed a “courtyard tower” plan, characterized by a massive pyramidal tower with sloping stone glacis that is set into a wall enclosing a courtyard. Riklin proposed a first-century B.C.E. to first-century C.E. date for these sites, based on the material he collected at Opharim.⁷⁵ Riklin’s chronology has been confirmed by Barouch, who carried out excavations at Rujm el-Hamiri. He found evidence for two floors (occupation levels) in the tower, whose fills contained pottery dating from the mid–first century B.C.E. to first century C.E. A complete cooking pot of the first century C.E. was crushed when the ceiling of one of the rooms in the tower collapsed. A “Darom” or “Southern” oil lamp from a room in the courtyard indicates that occupation continued into the second century C.E. Other finds from the excavation include coins, glass, stone vessels characteristic of the first century B.C.E.–first century C.E., lead slingshot, and an ostrakon with “Jewish writing” of the first to second centuries C.E.⁷⁶ Barouch expanded Riklin’s list of structures with a “courtyard tower” plan to include more sites in Judea. Among these is Khirbet el-Qasr, which he resurveyed. He noted two different types of construction at the site, apparently reflecting different chronological stages. The earlier type of construction is characterized by very large, roughly worked blocks of stone, which are used in the tower and walls of the courtyard. The later construction is of medium-sized ashlar, which are visible in the olive press and ancillary rooms in the courtyard. Based on its plan and on the pottery he collected, including a wheelmade (“Herodian”) oil lamp, Barouch has dated the initial construction and occupation of the structure at Khirbet el-Qasr to the first century B.C.E. and first century C.E. A miqveh (ritual bath) about 20 m west of the tower apparently also belongs to this phase. The olive press and other structures surveyed by Hirschfeld on the south side of the courtyard belong to a later reoccupation in the Byzantine period.⁷⁷ Barouch’s resurvey of Rujm el-Qasr yielded similar results; most of the potsherds recovered date to the “Roman” period, while the existence of an apparent miqveh at the site also points to a first-century B.C.E. to first-century C.E. date.⁷⁸

There is thus no evidence to support the association of the sites along the eastern edge of Mount Hebron with the *limes* or with any other defensive system of the fourth to fifth centuries. Hirschfeld himself now apparently accepts a first-century B.C.E. to first-century C.E. date for the structures at Rujm el-Hamiri,

75. S. Riklin, “A Hasmonean Site at Opharim,” in Z. H. Erlich and Y. Eshel (eds.), *Judea and Samaria Research Studies: Proceedings of the 3rd Annual Meeting—1993* (Kedumim-Ariel: The Research Institute, The College of Judea and Samaria, 1994) 127–36 (in Hebrew); idem, “The Courtyard Towers in the Light of Finds from ‘Ofarim,” *Atiqot* 32 (1997) 95–98 (in Hebrew with an English summary on p. 42*).

76. Y. Barouch, “The Roman Castles in the Hills of Hebron,” in Z. H. Erlich and Y. Eshel (eds.), *Judea and Samaria Research Studies: Proceedings of the 4th Annual Meeting—1994* (Kedumim-Ariel: The Research Institute, The College of Judea and Samaria, 1995) 137–43 (in Hebrew); idem, “Road Stations in Judea during the Second Temple Period,” in Y. Eshel (ed.), *Judea and Samaria Research Studies: Proceedings of the 6th Annual Meeting—1996* (Kedumim-Ariel: The Research Institute, The College of Judea and Samaria, 1997) 125–35 (in Hebrew). I was able to examine the pottery from Barouch’s excavations at Rujm el-Hamiri and can confirm that the types are characteristic of the 1c B.C.E. and 1c C.E. I did not see any Byzantine pottery among the material.

77. Barouch, “Road Stations,” 128–29.

78. *Ibid.*, 129–30.

Rujm el-Qasr, and Khirbet el-Qasr, because he bases his current claim that Qumran was a fortified manor house on comparisons with these sites.⁷⁹ The fact that “courtyard tower” plans are a feature of the sectarian settlement at Qumran and the villa at Khirbet el-Muraq (“Hilkiah’s palace”) indicates that not all sites with this layout functioned primarily as forts.⁸⁰ In addition, the published ceramic material indicates that some of these sites were later reoccupied, apparently mainly in the sixth century. However, as Kloner and Hirschfeld recognized, the nature of the remains at Khirbet el-Qasr suggests that this reoccupation was civilian and agricultural rather than military.

Conclusion

There is no evidence to support the suggestion that a continuous, fortified line of defense was established in southeastern Judea in the fourth and fifth centuries. The sites along the eastern side of Mount Hebron that Hirschfeld surveyed and identified as *limes* forts date instead to the first century B.C.E. and first to second centuries C.E. In addition, comparisons with Qumran and Khirbet el-Muraq indicate that the “courtyard tower” plan is not necessarily an indicator of military presence or of the primary use of the site as a fort. The forts at ‘Ein Boqe’ and Upper Zohar were apparently established in the mid-sixth century. The former was occupied until the end of the seventh century (though the final phases of occupation were not necessarily military in nature), while the latter seems to have been abandoned by the mid-seventh century. None of the sites discussed here belongs to the *limes* system supposedly established by Diocletian or his immediate successors. This is not to deny the existence of any forts dating to the fourth and fifth centuries, for unless future excavations prove otherwise, it is reasonable to accept the testimony of the ancient sources regarding the existence of Roman military camps or fortresses at Chermoula, Berosaba, Malatha, and Thamara. However, the establishment of the forts at ‘Ein Boqe’ and Upper Zohar around the middle of the sixth century, apparently during Justinian’s reign, contradicts Parker’s assertion that, “there is no evidence that any fortifications were built or even repaired” at this time.⁸¹ This claim is based at least partly on the following passage from Procopius’s *Anecdota* (24.12–14):

Since the discussion of the army leads me to it I shall add one further point. The Roman rulers in former times stationed a large force of soldiers everywhere in the frontier districts of the state in order to guard the frontiers of the empire, particularly in the eastern part, checking the incursions of Persians and Saracens. These troops they called *limitanei*. These the emperor Justinian treated in the beginning so carelessly and so miserly that their paymasters were four or five years behind in paying their salaries. When peace was concluded between the Romans and the Persians these wretched men were compelled to donate the salary owed to them for a specific period to the public treasury, on the pretence that they too would profit from the blessings of peace. Later he took away from them the very title of an army without

79. See Y. Hirschfeld, “Early Roman Manor Houses in Judea and the Site of Khirbet Qumran,” *Journal of Near Eastern Studies* 57 (1998) 161–89. However, in a conversation on 25 June 2000, Hirschfeld said he still thinks there is a possibility that some of these sites could have been forts in the late Roman-Byzantine period.

80. Barouch has discussed some of the possible functions of these sites, many of which are located on major roads. Although he refers to most of them as forts, he has noted that they could also have been used as road stations; see Barouch, “Road Stations,” 133. For the villa at Khirbet el-Muraq, see E. Damati, “The Palace of Hilkiya,” *Qadmoniot* 60 (1982) 117–21 (in Hebrew); and idem, “Hilkiah’s Palace,” in M. Broshi (ed.), *Between Hermon and Sinai: Memorial to Amnon* (Jerusalem: Yedidim, 1977) 93–113 (in Hebrew). For Qumran, see J. Magness, “A Villa at Khirbet Qumran?” *Revue de Qumran* 63 (1994) 397–419.

81. Parker, *Romans and Saracens*, 152. In a verbal communication on 6 January 1998, Parker suggested to me that the establishment of small forts in southeastern Judea in the mid-sixth century, coinciding with the abandonment of many of the forts in Jordan, could reflect the contraction of the frontier during Justinian’s reign.

reason. Henceforth the frontiers of the Roman empire remained without guards and the soldiers suddenly had to look to the hands of those accustomed to do good deeds.⁸²

The evidence from 'Ein Boqeq and Upper Zohar supports Isaac's view that this passage has often been misinterpreted, and accords well with his observation that Justinian's reign represents one of the main phases of military building activity in this region.⁸³ On the other hand, these forts could have been constructed by the local governing authorities of Palestine, instead of being the result of direct imperial initiative.⁸⁴ Justinian attempted to deal with civil disorder in Palestine (especially with disturbances caused by the Samaritans) by increasing the authority of the governor (proconsul) with respect to the collection of taxes and the maintenance of law and order. The *dux* was in charge of the *limitanei* and *foederati*.⁸⁵ The construction of the forts at 'Ein Boqeq and Upper Zohar in the mid-sixth century (and perhaps the fort at Hatrurim as well) seems to reflect the concern of the governing authorities to safeguard this particular stretch of road. As Harper noted, these small forts and others in the area suggest a governmental effort to police the routes of travel along the 'Arabah Valley and from there to the Mediterranean ports.⁸⁶ Since they were apparently intended to safeguard the goods and people traveling along the roads, these forts were constructed primarily for economic rather than military reasons. One of the main imperial concerns would have been ensuring that the taxes collected throughout the provinces reached the treasury.⁸⁷ The governing authorities would have also wanted to guarantee the safety of the numerous tourists (pilgrims) who visited the Holy Land sites during the Byzantine period, for the money they spent on food, lodging, souvenirs, tour guides, and transportation was an important source of revenue for the local economy. Although the roads were also used for the movement of military troops, and at least some of the threat posed to travelers came from nomadic tribes, there does not appear to be evidence in southeastern Judea for a continuous defensive line against nomadic incursions. As Isaac concluded, "Policing the provinces was indeed one of the tasks of the army, but only in so far as necessary to maintain political and financial control."⁸⁸ Finally, the case of the fort at Khirbet el-Qasr serves as a reminder that not every tower or road station necessarily fulfilled a military function, and that the function of such structures often changed over time.⁸⁹

The archaeological evidence reviewed here lends support to Isaac's view that, "the military boundary [of the empire] was never organized as a 'line of defence.'"⁹⁰ The Roman imperial army's role was primarily to guarantee the security of the roads rather than defend the settlements within the borders from nomadic invasions. The army was stationed along strategic roads both for its own needs and to control the movement of subject peoples.⁹¹ This chapter has demonstrated that the concept of a continuous line of defense of fourth- to fifth-century date is not valid for southeastern Judea.

82. From Isaac, *The Limits of Empire*, 210; for a discussion of this passage, see n. 37 above.

83. *Ibid.*, 210–12.

84. *Ibid.*, 367–68.

85. *Ibid.*, 90; also see P. Mayerson, "Justinian's Novel 103 and the Reorganization of Palestine," *Bulletin of the American Schools of Oriental Research* 269 (1988) 65–71.

86. Harper, *Upper Zohar*, 115.

87. Hence Justinian's Novel 103, which increased the authority of the proconsul with respect to the collection of taxes; see n. 82 above. As Isaac notes, the Roman army was responsible for the collection of some taxes, and the administrative boundaries within provinces delimited taxable property; see Isaac, *The Limits of Empire*, 282, 397.

88. *Ibid.*, 420.

89. *Ibid.*, 185–86, 207, 423.

90. *Ibid.*, 3.

91. *Ibid.*, 69–72, 103, 213–18.

CHAPTER 6

The Central Negev

[W]hen the nationalism of the succeeding Caliphs, coupled with the traditional Arab indifference to agriculture, began to be felt, it presaged the end of prosperity in the Negev and the eventual return of that country to its original desert state. By the eighth century the decline had already set in and the curtain had begun to fall on Nessana and the other towns of the Negev.¹

The number of wine presses and other installations connected with the production of wine exceeds anything known from the other towns of the Negev. Perhaps this contributed to the fury with which the churches of Oboda were burnt by the Arab conquerors: unable to exploit this source of riches, the Arabs set the churches on fire.²

It appears that Arab settlements failed to take root in the Negev, owing to the lack of interest and neglect on the part of the central Muslim government.³

The Geography of the Negev

The Negev can be divided into four geographical regions: the northern Negev, the central Negev, the southern Negev, and the 'Arabah. The northern Negev, centered around modern Be'er-sheva', drains into both the Mediterranean Sea and the Dead Sea. The central Negev, in the center of which lies the ancient site of Avdat (Oboda), contains the basins of a number of large wadis that drain into the 'Arabah. The southern Negev is the northeast extension of the high mountains of southern Sinai. The 'Arabah is the long, narrow strip extending from the town of Eilat on the Gulf of 'Aqaba to the Dead Sea.⁴ This chapter and the next focus on the Byzantine and early Islamic farms and settlements in the central and northwest Negev.⁵ The northwest Negev can be divided into two subregions: the coastal plain and the northwestern plains and foothills. The coastal plain is an area of relatively low relief covered by sand dunes, sand fields, and deposits of wadi alluvium. The northwestern plains and foothills consist of rolling plains, some 30–60 km wide, separated by hills and ridges of limestone, chalk, and flint. This region lies 200–450 m above sea level. A number of large wadis whose sources are in the central Negev highlands, such as Nahal Be'er-sheva' and Nahal Lavan, cut through the plains and drain into the Mediterranean.⁶ Aeolian loess covers

1. Colt, *Excavations at Nessana, Volume 1*, 22–23.

2. A. Negev, *The Architecture of Oboda*, 9.

3. R. Cohen, *Archaeological Survey of Israel, Map of Sede-Boqer—West (167) 12–03* (Jerusalem: Department of Antiquities and Museums, 1985) VIII.

4. Elliott, *The Elusa Oikoumene*, 18.

5. For early Islamic settlement in the southern Negev and 'Arabah, see U. Avner and J. Magness, "Early Islamic Settlement in the Southern Negev," *Bulletin of the American Schools of Oriental Research* 310 (1998) 39–57.

6. Elliott, *The Elusa Oikoumene*, 18–20.

most of the area in the vicinity of Be'er-sheva^c, while to the south around Nessana and Shivta it has accumulated mainly in the wadi beds. The latter area is also erosion-scarred. Approximately one-third of the northwestern plains and foothills are covered by large sand dunes.⁷ The central Negev can also be divided into two subregions: the central Negev highlands and the lower sedimentary Negev (or southern Negev highlands; see below). The central Negev highlands cover some 2000 sq. km, including the sites of Mamshit and Avdat. They are composed of a series of parallel ridges and valleys running in a northeast–southwest direction. The elevation ranges from 450 to 1000 m above sea level, with Har Ramon (1035 m) being the highest point. The ridges are characterized by relatively gentle slopes facing northwest and steep slopes facing southeast. The main wadis between the high ridges drain into the Mediterranean and the Dead Sea. Alluvial plains lie adjacent to the wadis, and loess has accumulated in the wadi beds.⁸ The rest of the landscape consists mostly of rock outcrops, hammadas, shallow desert soils, reg soils, gravelly slopes, and coarse desert alluvium.⁹

The Distribution of Negev Farms and Campsites

Together the northern Negev and central Negev highlands¹⁰ extend more than 50 km south of the Be'er-sheva^c Valley and include the ancient towns of Nessana, Mampsis, Ruheibeh (Rehovot), Elusa, Shivta, and Avdat. The annual average rainfall of 100–150 mm is less than the 200–300 mm minimum usually required for dry farming. However, archaeological surveys have revealed the existence of a tremendous network of terraced wadis and hundreds of agricultural farms in the hinterlands of the ancient Negev towns. These attest to large-scale agricultural activity during the Byzantine period. Many of the farmhouses resemble the highest-quality dwellings in the towns, with ashlar masonry, carved architectural elements, and stone arches and slabs belonging to flat roofs.¹¹ These farmhouses become less common and eventually disappear as one moves progressively farther south and away from the towns, with the Ramon Crater roughly marking their southernmost limit.¹² The region that lies to the south, referred to by Avni as the southern Negev highlands,¹³ is a semi-arid steppe with an average annual rainfall of only 50–100 mm. The presence of hundreds of ancient sites consisting of simple round structures suggests that the latter area was inhabited by a pastoralist or seminomadic population. Numerous small animal pens and primitive agricultural terraces reflect an economic base of herding and seasonal agriculture. Most of the sites are far from the few natural water sources and indicate seasonal exploitation of the poor environment. These sites form a strip attached to the periphery of the permanent settlements to the north of the Ramon Crater, extending as far as 70 km to the south.¹⁴

7. Ibid., 20.

8. Ibid., 21.

9. Ibid., 22.

10. Haiman uses the term *Negev lowlands* to refer to the northern Negev and northern half of the central Negev highlands; his “northern Negev highlands” is the strip along the northern side of the Ramon Crater; see Haiman, “Agriculture and Nomad-State Relations,” 29–30. Avni refers to the northern Negev and northern half of the central Negev highlands as the “western and northern Negev highlands” and the strip along the northern side of the Ramon Crater as the “central Negev highlands”; see G. Avni, *Nomads, Farmers, and Town-Dwellers*, 84–85.

11. Haiman, “Agriculture and Nomad-State Relations,” 30.

12. Ibid., 30–31; Avni, *Nomads, Farmers, and Town-Dwellers*, 5, 19.

13. Haiman refers to this region as the central Negev highlands; Haiman, “Agriculture and Nomad-State Relations,” 30.

14. Ibid., 31–32; Avni, *Nomads, Farmers, and Town-Dwellers*, 4–6; idem, “Early Mosques in the Negev Highlands: New Archaeological Evidence on Islamic Penetration of Southern Palestine,” *Bulletin of the American Schools of Oriental Research* 294 (1994) 91–92.

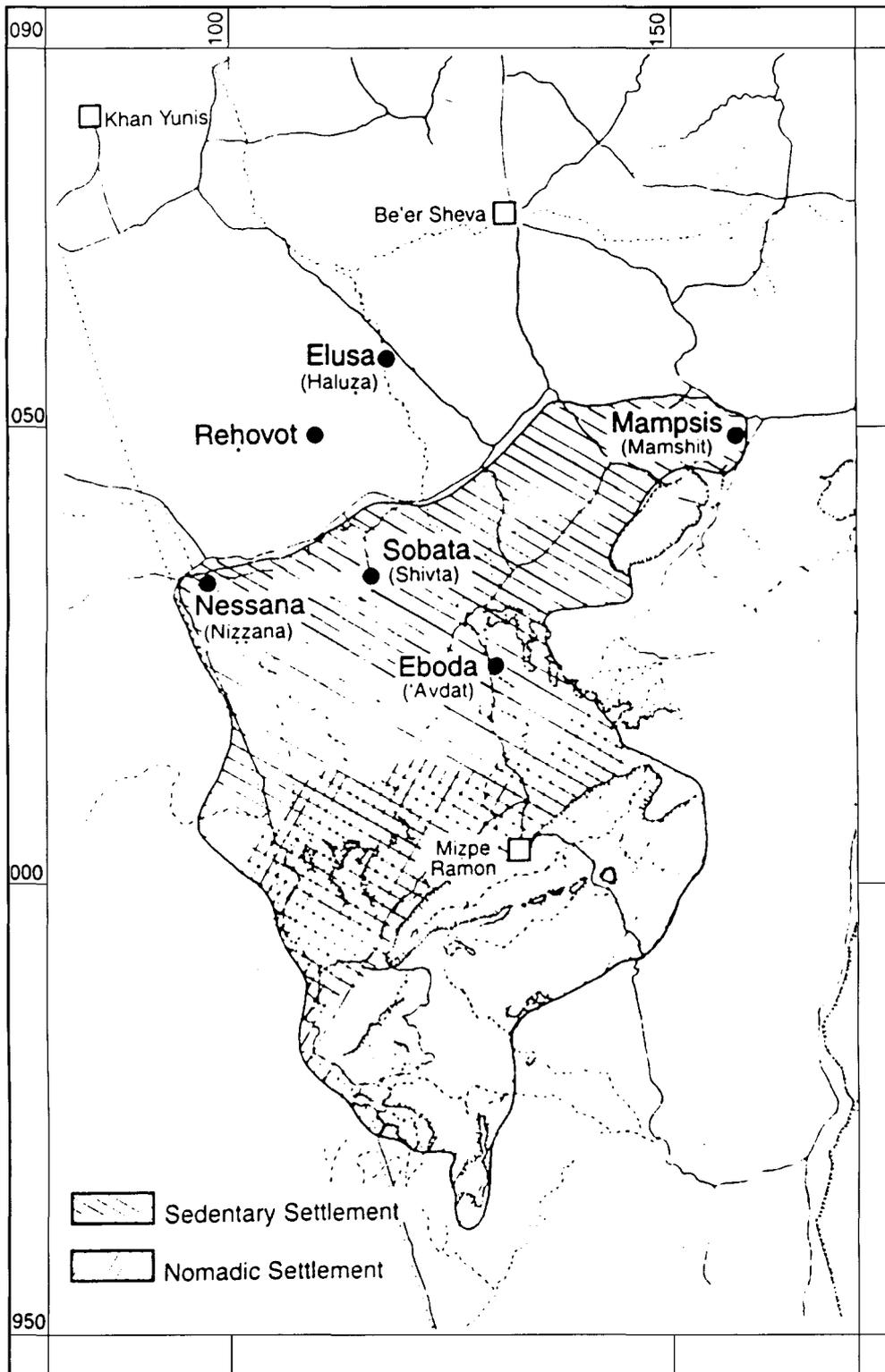


Fig. 8. Map of the Central Negev, showing the location of the towns and the area of the farms and nomadic settlements. From G. Avni, *Farmers and Town-Dwellers: Pastoralist-Sedentist Interaction in the Negev Highlands, Sixth–Eighth Centuries C.E.* (Jerusalem: Israel Antiquities Authority, 1996), fig. 2 on p. 5. Reprinted with permission of the Israel Antiquities Authority.

There thus appear to have been two separate but adjacent settled areas on Palestine's southern periphery in the Byzantine and early Islamic periods. The area to the north of the Ramon Crater was populated by permanent settlers and farmers. There seems to be a scholarly consensus that the emergence of this settled area in the desert, which required considerable investment in the construction of terraced wadis to establish an infrastructure for agriculture, was due to the policies of the Byzantine Empire. These policies aimed at defending the borders by establishing an agricultural frontier beyond the natural capacity of the area and its support during drought years. Although many of the permanent settlers were probably descendants of Nabatean Arab desert nomads, their material culture indicates that they were assimilated into the dominant Mediterranean Christian culture.¹⁵ The area to the south was apparently inhabited by seminomads who lived in round, temporary structures. Although their ethnic origin was probably similar to that of the permanent settlers, their material culture was different. Since the poor natural resources of this area could not have supported this population, Haiman has suggested that, like the Bedouin of modern Israel, they derived their livelihood mainly from close relations with the permanent settlers as hired laborers. This suggestion is supported by the distribution of the temporary settlements, which form a consistent belt south of the permanent settlements without any relationship to environmental factors such as water sources.¹⁶

The Date of the Negev Farms: Haiman's Interpretation

According to current scholarly consensus, the finely constructed farms in the vicinity of the Negev towns were constructed during the Byzantine period. However, Haiman has suggested that new farms of a different type were established farther to the south during the early Islamic period. These farms, exemplified by the one he excavated at Nahal Mitnan, do not have the stone roofs supported by arches and carved architectural details found in the other Negev farms.¹⁷ They are located in a band running from northeast to southwest along the northern side of the Ramon Crater. Haiman identified 80 farms of this type in his survey, and an estimated 300 have been found throughout the Negev highlands. In contrast to the Byzantine farms to the north, which belonged to the administrative domain of the neighboring Negev towns, these farms are scattered over a broad area without any evidence of administrative centers. Most contain one or two farmhouses with two to three nuclear units. Haiman has proposed that these farms, together with their fields and agricultural installations would have been jointly owned by groups of families, analogous to a Bedouin "paternal house."¹⁸ The animal pens found at some of the farms attest to pastoralism, though pens are more prevalent at the seminomadic sites farther to the south. Since, according to Haiman, these farms were not cost effective, he has suggested that they were established by the state to create a barrier of permanent agricultural settlers in peripheral regions.¹⁹ He believes that the farms' uniform layout and the considerable effort and knowledge required to build the associated network of terraced wadis reflect a process of state-initiated sedentarization. This was designed to settle a seminomadic population that was already in the stage of spontaneous settlement. This sedentarization occurred to the south of the Byzantine settlement areas, up to 30 km south of Nessana. Farther to the south, there is a substantial

15. Haiman, "Agriculture and Nomad-State Relations," 32.

16. *Ibid.*, 33–34. Haiman has proposed that these seminomads might be the "Saracens," who are portrayed in a negative light in Byzantine sources. The limited distribution of temporary settlements in close proximity to the permanent settlements suggests that the seminomads underwent a process of spontaneous settlement during the Byzantine period, similar to that of the contemporary Bedouin in the Be'er-sheva^c Valley.

17. *Idem*, "An Early Islamic Period Farm at Nahal Mitnan," 1–13; see the discussion below.

18. *Idem*, "Agriculture and Nomad-State Relations," 41.

19. *Ibid.*, 44–48.

increase in the number of temporary sites with animal pens and simple terraces.²⁰ Unlike the differences between the material culture of the seminomads and the permanent settlers in the Byzantine period, the finds attest to a link between the residents of the newly established farms and the seminomads to the south. These links include architecture, the presence of temporary sites in the area of the farms, and common ritual installations.²¹

Scholars have generally dated the decline of the Byzantine towns and farms of the Negev to the seventh century. This is based mainly on historical sources, which describe this as a time of political decline, curtailment of support for the periphery, plagues, earthquakes, and foreign invasions and conquests. Other frontier and rural areas throughout the Levant supposedly declined at this time as well. However, the pottery found in the surveys of the Negev farms and settlements indicates that they were occupied during the early Islamic period, contradicting the traditional view of this period as one of decline.²² This is confirmed by excavations at several sites, which have produced coins and other finds dating to the Umayyad period, and by the discovery of open mosques next to some of the sites (see below). These finds indicate that the farms and settlements existed at least until the late eighth to early ninth centuries.²³ But when were they established, and under what circumstances?

According to Haiman, the pottery indicates that the farms he identified could have been established no earlier than the end of the Byzantine period (that is, the second half of the sixth century). He has interpreted the Negev evidence in light of a hypothesis proposed by H. Kennedy (a hypothesis that I believe is incorrect; see my chapter on this below), according to which there were two peaks of frontier settlement in the Levant. The first was during the Byzantine period (before the mid-sixth century), and the second was during the Umayyad period. Between these two peaks, there was a period of decline, though the Negev settlements were not necessarily abandoned.²⁴ If Kennedy is correct that the end of Byzantine period was a time of dramatic decline in settlement, it is unlikely that these farms, which Haiman views as a state-sponsored enterprise, could have been established then. Thus, Haiman has dated their establishment to the early Islamic period.²⁵ He views their construction as one of the many development enterprises initiated by the Umayyad rulers. The Umayyads found the strip of former Byzantine frontier settlement in the Negev in various stages of decline. They not only developed the distant frontier, but also revived some of the Negev towns, such as Avdat, Elusa, Shivta, and Nessana.²⁶ According to Haiman, the rise of the Abbasid dynasty and the transfer of the capital from Damascus to Baghdad marked a change in the priorities of the state, which was manifested primarily by discontinuation of support for the periphery. The settlements in the Negev, which depended on that support, apparently disintegrated and were abandoned at the end of the eighth century or beginning of the ninth century.²⁷

Haiman has attributed the establishment of the Negev farms to two factors: imperial policy aimed at protecting the frontier and an anticipated process of gradual transition of seminomads from a nomadic lifestyle to permanent settlements sponsored by the state, through a stage of spontaneous settlement. He has noted that there were cycles in which nomads clustered on the margins of the southern periphery of Pales-

20. *Idem*, "An Early Islamic Period Farm at Nahal Mitnan," 11; *idem*, "Agriculture and Nomad-State Relations."

21. *Ibid.*, 44.

22. *Ibid.*

23. *Ibid.*, 37–41.

24. *Ibid.*, 34.

25. *Ibid.*, 39–41.

26. *Ibid.*, 45; Haiman follows the traditional view that Rehovot was not revived, but see my discussion in the chapter on the Negev towns.

27. *Ibid.*; on p. 50 n. 15, Haiman qualifies his conclusion by noting that, since the chronology of Abbasid pottery needs to be refined, some of these settlements might have continued to exist after the early ninth century.

tine, wherever it was, and gradually became permanent settlers who drew other nomads toward the periphery of their settlements. The increase in seminomadic sites in the southern Negev highlands during the Umayyad period is apparently connected with the development of agricultural farms just to their north, the establishment and continued existence of which depended on a steady flow of state resources. The state established these farms to offset the potential threat posed by the seminomads who had settled on the frontier; the issue of cost effectiveness and the need to prove that the farms could function in an adverse environment were secondary.²⁸ Thus, Haiman has attributed the establishment of the farms he identified to the sponsorship of the Umayyad government, suggesting that the process of nomadic sedentarization occurred within the framework of a strong central authority.

The Date of the Negev Farms: Avni's Interpretation

Avni has proposed a different model and chronology for the establishment of the farms and seminomadic settlements discussed by Haiman.²⁹ He dates the pottery found at these sites from the mid-sixth to eighth centuries (see below). According to Avni, the number of finds and the repeated cleaning of the floors reflect continuous occupation for a relatively long period. Avni thus dates the establishment of these sites to the end of the Byzantine period, arguing that the mosques, Umayyad coins, and other early Islamic artifacts are associated with a late phase in their existence.³⁰ Since Avni accepts the traditional view that the Byzantine Negev towns declined dramatically during the early Islamic period, he must account for the establishment of new farms and seminomadic settlements at this time. He has suggested that the answer to this apparent contradiction may be found by taking a broader chronological perspective of the Negev settlements. Archaeological and historical evidence indicates that a lengthy settlement process began in the desert periphery during the fifth and sixth centuries. At this time, there were two separate groups of settlements: (a) the towns of the Negev, surrounded by a belt of villages and farms that reached as far as the northern Negev highlands; (b) the seminomadic sites to the south, which maintained economic relations with the permanent settlements. The peripheral nomadic and seminomadic population was connected economically with these settlements, leading to a continual process of sedentarization. As agricultural settlements were established farther to the south, the seminomadic settlements more to the south gradually became more sedentary, reaching a peak in the seventh to eighth centuries. According to Avni, the process of sedentarization was apparently related to rather than contradicted by the decline of the Negev towns. The impoverishment of the towns undermined the seminomads' economic base. As opportunities for trade, escort services, and hired labor dwindled, the seminomadic population was forced to seek alternative means of livelihood. Many became more sedentary and began to farm the land using methods learned from the farms on the outskirts of the towns. To survive, the seminomadic tribes of the region diversified their economic base by adopting intensive runoff agriculture and by abandoning long-range migration in favor of short-range transhumance. Despite their weakened state, the Negev towns were still capable of preventing massive nomadic infiltration. It was only in the eighth century, when the towns were virtually empty, that the Negev highland seminomads were able to penetrate northward. The abandonment of the farms and seminomadic settlements in the late eighth to early ninth centuries may be ascribed to the fall of the Umayyad caliphate and the rise of the Abbasid dynasty, which resulted in a steep decline in the status of Palestine.³¹

28. *Ibid.*, 46.

29. See Avni, *Nomads, Farmers, and Town-Dwellers*; *idem*, "Early Mosques in the Negev Highlands."

30. *Idem*, "Early Mosques in the Negev Highlands," 93.

31. *Idem*, *Nomads, Farmers, and Town-Dwellers*, 86–87.

Haiman or Avni: Who Is Correct?

Without more excavations and a precise chronology for the local ceramic types, in most cases it is impossible to determine whether the central Negev farms and settlements were established before or after the Muslim conquest. The fact that most of the pottery recovered and published to date comes from surface surveys means that diagnostic types of certain periods may not be represented in the samples. In addition, the cooking vessels and storage jars that predominate at these sites are not (and perhaps cannot be) closely dated. In fact, no changes can be discerned in the local ceramic repertoire of southern Palestine immediately following the Muslim conquest. Instead, changes began to appear only in the late seventh to early eighth centuries.³² There are also inconsistencies in the terminology employed by the Negev surveyors; for example, what Haiman refers to as “early Arab,” especially in his later publications, is the same late-sixth- to eighth-century pottery that almost everyone else describes as “Byzantine” or “late Byzantine” (see below). This creates the false impression that Haiman’s survey maps contain many more early Islamic sites than the others.³³

D. Whitcomb has criticized Avni for simply substituting the traditional model of violent conquest and destruction by invading Arab tribes with one of gradual infiltration.³⁴ Avni’s model has two other flaws. First, it presupposes a dramatic decline in the Negev towns during the seventh century. This is not supported by the archaeological evidence, which suggests that, although these towns reached their peak during the sixth and early seventh centuries, some flourished well into the early Islamic period (see my chapter on the Negev towns below). Avni’s second premise is that the decline of the Negev towns caused the semi-nomads to lose their main economic base, which forced them to settle down and start farming to support themselves. Even if all the Negev towns declined in the seventh century, this would not necessarily have caused the nomads to adopt a sedentary lifestyle. J. D. Elliott has outlined three models describing the processes that lead to the sedentarization of nomadic populations: “drought and decline,” “defeat and degradation,” and “failure and fall-away.”³⁵ According to the drought and decline model, pastoral nomads are forced into sedentarization after droughts destroy or decimate their herds. In the defeat and degradation model, pastoralists are forced to settle after having been defeated by another tribe or by a strong state government. In the failure and fall-away model, individual families that cannot maintain themselves through pastoralism have to move to sedentary communities and take up agriculture or other employment. However, Elliott has suggested adopting a more general model of “adaptation and response” because of the wide variety of possible causes for sedentarization. According to this model, sedentarization represents a voluntary shift from one available pattern to another in response to changing pressures, constraints, and oppor-

32. See Magness, *JCC*, 11–12; idem, “The Dating of Black Ceramic Bowl,” 201–2; P. Mayerson, “Some Observations on the Negev Archaeological Survey,” *Israel Exploration Journal* 46 (1996) 103–4. Nevo also recognized this; see Nevo, *Pagans and Herders*, 141: “In the Negev as a whole, the changeover to Arab rule is attested in the pottery record only from the 70s AH/690s AD.” Accordingly, in the following discussion, “Byzantine” is used to denote ceramic types of sixth- to seventh-century (and sometimes, earlier) date, while “early Islamic” refers to pottery of eighth- to ninth-century date.

33. These problems have been noted by Mayerson, “Some Observations on the Negev Archaeological Survey,” 102–3: “During the early stages of the survey, they [the surveyors] seemed to have no difficulty in distinguishing between the material finds (i.e. pottery) of the Byzantine and Arab periods. When Arab inscriptions and other objects came to light, however, they began to have second thoughts about what was Byzantine and what was Arab.”

34. D. Whitcomb, Review of Avni, *Nomads, Farmers, and Town-Dwellers*, and S. A. Rosen and G. Avni, *The ‘Oded Sites: Investigations of Two Early Islamic Pastoral Camps South of the Ramon Crater* (Beersheba: Ben-Gurion University, 1997), in *Bulletin of the American Schools of Oriental Research* 311 (1998) 100–102.

35. Elliott, *The Elusa Oikoumene*, 57.

tunities both internal and external to the society, instead of a forced and unavoidable process.³⁶ Avni's model comes closest to Elliott's "drought and decline," although it differs in that the decline of the Negev towns rather than drought forced the seminomads to settle down. However, Elliott has suggested that other factors led to the development of the Negev farms. The primary cause was external stress on the tribal societies of the northern and central Negev, which disrupted their adaptive system. This stress was caused by the increased population and political and military strength of the Negev towns. The secondary cause was the closer integration of the Negev into the pan-regional economic system of the Mediterranean world.³⁷ Elliott's model is similar to Haiman's, which views the process of sedentarization in the Byzantine and early Islamic Negev as similar to what occurred in the northern Negev during the last half of the nineteenth century and first half of the twentieth century. This analogy is valid based on similarities in the physical environment, sociocultural conditions, and external stresses.³⁸ Conversely, the neglect of the frontier by the state due to political and economic weakness, as in southern Palestine at the end of the Ottoman period, led to the decline of the settled areas. Without economic support from the state, the population of desert settlers, which grew far beyond the capacity of the land to support them, could not survive, forcing most of them to abandon the area.³⁹ This model is the opposite of Avni's, for it proposes that nomadic sedentarization occurred in the peripheral lands of southern Palestine in times of prosperity and a strong central government, not when there was a weak governing authority or a period of decline. This combined with the fact that the traditional view has greatly exaggerated the decline of the Negev towns during the early Islamic period undermine the validity of Avni's model. Since the farms could not have been self-sufficient, that is, under the local conditions they could not have produced enough to meet their own needs, their economy *must* have been integrated with that of the local towns. On the other hand, the fact that at least some of these farms could have been (and apparently were) established before the Muslim conquest contradicts Haiman's suggestion that they are the result of an Umayyad state-sponsored initiative. His dating of these farms to the early Islamic period is based on the incorrect assumption that Palestine experienced a decline during the decades preceding the Muslim conquest. Finally, Haiman's emphasis on the hostile rather than symbiotic relationship between seminomadic and sedentary populations represents a modified version of the traditional view of the Saracens during the Byzantine period, which he has transferred to the Umayyad period.

Although both Haiman's and Avni's models contain some valid points, neither is completely correct. The process of sedentarization represented by the establishment of the farms that Haiman identified was probably caused by various internal and external stresses on the local populations. The establishment of these farms and the seminomadic settlements farther to the south apparently occurred during a period of prosperity rather than one of decline in the Negev towns. The archaeological evidence indicates that occupation at all of these towns continued through the seventh century, and at some of them long after that. The establishment and occupation of the farms and seminomadic settlements was apparently a process that continued through the sixth, seventh, and eighth centuries. The rest of this chapter, and the two chapters following it consist of a review of the archaeological evidence for the chronology of the northern and central Negev farms and settlements, proceeding roughly from north to south. It includes only the sites

36. *Ibid.*, 58. This view is similar to Salzman, "Introduction: Processes of Sedentarization," 14; and LaBianca, *Sedentarization and Nomadization*; see also my chapter on "Settlement Processes and Patterns of Land Use" above.

37. Elliott, *The Elusa Oikoumene*, 59–61.

38. *Ibid.*, 92; Haiman, "Agriculture and Nomad-State Relations," 47: "During the above-mentioned periods, nomadism and sedentarism were affected more by geopolitical conditions than by the natural environment." Also see Bunimovitz, "Socio-political Transformations," 197–200: "The steps taken by the Ottoman government in order to push back the frontier that had expanded over extensive portions of Syria seem as if they had been borrowed from the Egyptian policy of the thirteenth–twelfth centuries BCE" (p. 200).

39. Haiman, "Agriculture and Nomad-State Relations," 48.

from which chronologically diagnostic pottery and/or other dated finds such as coins, inscriptions, and mosques have been published.

Sde Boqer

The Mosque and Settlement at Sde Boqer

Sde Boqer lies in the central Negev highlands. This mountainous, semi-arid region has an average annual rainfall of about 100–150 mm. Bare rock or “desert pavement” covers the surface of the ground, and there are loess and clay deposits in the wadi valleys. A number of asymmetrical folds forming parallel mountain ridges and valleys run through the region in a roughly northeast–southwest direction.⁴⁰ The plain-like character of the central valley of Nahal Boqer provided good conditions for cultivation and transport in this largely mountainous area.⁴¹

An early Islamic settlement at Sde Boqer (near the kibbutz by that name), covering an area of 0.5 sq. km contains the remains of dozens of structures. The settlement and a mosque on a hilltop to the west were surveyed by R. Cohen.⁴² Excavations were conducted in 1982–87 by the late Y. D. Nevo and A. Rosenberg.⁴³ Nevo interpreted the Sde Boqer site as a ritual center for nomads who inhabited the area during the seventh and eighth centuries. The mosque consisted of an open, rectangular room (5 × 12 m), with a curved mihrab in the middle of its southern wall, and a small, square room leading into a courtyard (9 × 10 m). The walls, preserved to a height of 0.6 × 0.8 m, apparently originally stood to a height of about 0.8–1.0 m. Several hundred Arabic inscriptions were unearthed in the vicinity of the mosque, some of which antedate its construction (as indicated by the fact that the mosque obliterated some of the inscriptions).⁴⁴

Haiman has responded as follows to Nevo’s interpretation of the settlement at Sde Boqer as a cultic center and the other Negev farmsteads and agricultural installations as cultic structures:

Nevo’s view that the agricultural system served cultic purposes is far-fetched and difficult to accept. Nevo’s contention that since the structures at Sde Boqer were built on a rock with a steep slope they could not be used for dwelling is contradicted in excavations of sites in the Negev Highlands, where floors with domestic vessels were uncovered. Similarly, in Sede Boqer only domestic vessels were found. The location of the balanced thresholds of Sede Boqer structures, which were higher than the level of the natural rock, alludes to the existence of regular floors. Apparently, the natural rock was leveled with a filling to create a horizontal floor. Based on installations and hearths attached to the inner walls of the structures, which now appear to be “hanging in the air” above the level of the natural rock at the level of the thresholds and the estimated level of the horizontal floor, in my opinion, Sede Boqer is a large agricultural farm or a small village.”⁴⁵

40. R. Cohen, *Archaeological Survey of Israel: Map of Sede Boqer—East (168) 13–03* (Jerusalem: Archaeological Survey of Israel, 1981) viii.

41. Idem, *Map of Sede-Boqer—West*.

42. Ibid., 62–67; the mosque is Site 94; the settlement is Site 92.

43. Nevo, *Pagans and Herders*, 141; also see idem, *Sde Boker and the Central Negev, 7th–8th Century A.D.—Papers Presented to the 3rd International Colloquium: From Jahiliyya to Islam, The Hebrew University of Jerusalem, June 30 to July 6, 1985* (Jerusalem: IPS, 1985).

44. Cohen, *Map of Sede-Boqer—West*, 22*; Avni, “Early Mosques in the Negev Highlands,” 88–89. For the inscriptions, see below.

45. Haiman, “Agriculture and Nomad-State Relations,” 49–50 n. 11; also see Avni, “Early Mosques in the Negev Highlands,” 96, n. 6. Haiman also notes that the large number of threshing floors associated with the Negev sites,

Haiman makes the important point that all of the pottery recovered by Nevo in his excavations at Sde Boqer and in his surveys of the other Negev sites is domestic, not cultic in nature. There is thus no support for Nevo's interpretation of any of these sites and installations as cultic. As Whitcomb has demonstrated, an ideological, "revisionist" agenda that seeks to challenge and undermine traditional Islamic historiography underlies Nevo's interpretations.⁴⁶

During a visit in August 1999, Avni pointed out to me that Sde Boqer differs from other early Islamic sites in the central Negev in its large size and in the absence of adjacent dammed wadis with fenced-in slopes. This, he observed, is probably because the agricultural fields lay in the large, adjacent plain, which must have been under cultivation. The dwellings cover an extensive area along the sides of a wadi that drains into the plain, with the mosque on an adjacent hilltop overlooking the settlement.

The Pottery and Coins from Sde Boqer

All of the coins from Nevo's excavations at Sde Boqer postdate the monetary reforms of 'Abd el-Malek at the end of the seventh century. Two are Umayyad, while the latest specimens date to the reign of the Abbasid Caliph Muhammed al-Mahdi (775–785). According to Nevo, this is also the date of the pottery from the site (ca. 690–750).⁴⁷ The assemblage includes locally-produced versions of deep, hemispherical, early Islamic FBW cups or bowls of eighth- to ninth-century date;⁴⁸ other local bowls;⁴⁹ cooking pots, casseroles, and casserole lids;⁵⁰ bag-shaped storage jars, two of which have the swollen necks characteristic of the early Islamic period;⁵¹ and flasks with ridged necks.⁵² The relatively large number of oil lamps and lamp fragments from Sde Boqer contrasts with their absence from other Negev sites.⁵³ There is an almost intact, wheelmade ("Persian") lamp of sixth- to seventh-century date.⁵⁴ Two battered fragments belong to an early channel-nozzle oil lamp.⁵⁵ The other lamps also represent variants of the early channel-

which provide evidence of grain cultivation, contradicts Nevo's contention that the terraced wadis originally were intended exclusively for sheep and goat husbandry; see Haiman, "Agriculture and Nomad-State Relations," 42; Nevo, *Pagans and Herders*, 98–107.

46. D. Whitcomb, "Islam and the Socio-cultural Transition of Palestine: Early Islamic Period (638–1099 CE)," in T. E. Levy (ed.), *The Archaeology of Society in the Holy Land* (New York: Facts on File, 1995) 500–501 ("Revisionism in the Negev").

47. Nevo, *Sde Boker and the Central Negev*, 10; idem, *Pagans and Herders*, 142; Avni, "Early Mosques in the Negev Highlands," 93. The pottery from the excavations is illustrated in Nevo, *Pagans and Herders*, pls. PPL.5–8 (with discussion on pp. 144–45).

48. Nevo, *Pagans and Herders*, PPL.6:16–20; Magness, *JCC*, 196, FBW Bowls Form 1E.

49. Nevo, *Pagans and Herders*, PPL.6:1–5; 11–15.

50. Ibid., PPL.5:4–13.

51. Ibid., PPL.5:1–3; Magness, *JCC*, 230–31, Storage Jars Form 7.

52. Nevo, *Pagans and Herders*, PPL.6:6–9. For close parallels to these flasks, see S. H. Oked, *The Pottery of the Late Byzantine and Early Arab Periods at Tel Nessana* (M.A. thesis, Land of Israel Studies Department, Bar-Ilan University, 1993) pl. 11:13 (in Hebrew); R. Rosenthal-Heginbottom, "The Pottery," in Y. Tsafir et al., *Excavations at Rehovot-in-the-Negev* (Qedem 25; Jerusalem: Hebrew University) 88–89; ill. 133; pl. 3:140; Fischer and Tal, "Byzantine and Early Islamic Periods," figs. 6.131:6; 6.132:6–7.

53. Nevo, *Pagans and Herders*, PPL.7.

54. Ibid., PPL.7:12; Magness, *JCC*, 129. The presence of this type, for which I have suggested a 6c–7c date, either indicates that occupation began here before the end of the 7c, or that this type continued into the 8c. The latter possibility is suggested by the presence of a lamp of this type in an apparent 8c–9c context at Nahal Shahaq; see Y. Israel, D. Nahlieli, and Y. Ben-Michael, "The Nahal Shahaq Site: An Early Islamic Settlement in the Northern 'Arava," *Atiqot* 26 (1995) 7*, no. 17 (in Hebrew); see the discussion of this site below.

55. Nevo, *Pagans and Herders*, PPL.7:3; Magness, *JCC*, 255–58, Oil Lamps Form 4.

nozzle type, some with Greek and Arabic inscriptions encircling the shoulder.⁵⁶ The relatively rounded tip of the nozzles and low knob handles indicate that none of these lamps postdates the eighth century. There is also a black stone bowl, a type characteristic of the eighth to ninth centuries.⁵⁷ While I disagree with Nevo's interpretation of the site at Sde Boqer, his proposed late-seventh to eighth-century date, based on the pottery and coins, appears to be correct, though the range of some of the ceramic types suggests that occupation continued into the ninth century. A late-seventh-century terminus post quem for the beginning of occupation is further suggested by the complete absence of any Late Roman Red Wares, Fine Byzantine Ware types, and large "candlestick" lamps characteristic of the sixth to seventh centuries.⁵⁸

The three sherds illustrated by Cohen from his survey of the settlement consist of a deep, hemispherical, early Islamic bowl,⁵⁹ a storage jar whose slightly swollen neck points to an early Islamic date,⁶⁰ and the base of a jar.⁶¹ The four sherds illustrated by Cohen from his survey of the mosque consist of two cooking pots,⁶² a casserole lid,⁶³ and a Gaza amphora.⁶⁴ Thus, this pottery all lies within the same chronological range as the material published by Nevo.

The pottery and coins published from the surveys and excavations conducted in the settlement at Sde Boqer by Cohen and Nevo point to a late-seventh-century terminus post quem for its establishment. The occupation appears to date mainly to the eighth century, though it probably continued into the ninth century. This chronology is confirmed by the presence of several hundred Arabic inscriptions found in the vicinity of the adjacent mosque. Two of these were incised onto the bedrock outcrop on which the mosque sits, and clearly antedate its construction. Both bear the date A.H. 165 (781/782 C.E.), during the reign of the caliph al-Mahdi (775–85 C.E.).⁶⁵ They thus provide a late-eighth-century terminus post quem, that is, a date well after the beginning of the Abbasid period for the construction of the mosque at Sde Boqer and for the continued occupation of the settlement. This accords with the discovery of coins minted by al-Mahdi in Nevo's excavations.

56. Nevo, *Pagans and Herders*, PPL.7:1–2, 4–11; note that lamp no. 7 is reproduced from another site, since Nevo's fragment was too small to be drawn; Magness, *JCC*, 255–58, Oil Lamps Form 4.

57. Nevo, *Pagans and Herders*, PPL.6. Nevo (*ibid.*, 145) noted that like this one, all of the specimens from Sde Boqer were undecorated. The relatively thick walls and rounded base of the illustrated example, and the fact that it was undecorated, suggest that it was used as a cooking vessel; see Magness, "The Dating of the Black Ceramic Bowl."

58. For Late Roman Red Wares, see Hayes, *LRP*; for the other types, see Magness, *JCC*, 193–95, 236–41, 251–55. The presence of these types at other sites in the Negev and the relative richness and diversity of the ceramic assemblage from Sde Boqer mean that the absence of these types is due to chronological rather than geographical factors.

59. Cohen, *Map of Sede-Boqer—West*, 64, fig. 4:1; Magness, *JCC*, 196, FBW Bowls Form 1E.

60. Cohen, *Map of Sede-Boqer—West*, 64, fig.4:2; it is very similar to Nevo, *Pagans and Herders*, PPL.5:2; see Magness, *JCC*, 231, Storage Jars Form 7.

61. Cohen, *Map of Sede-Boqer—West*, 64, fig. 4:3.

62. *Ibid.*, 67, fig. 4:1–2; the first is similar to Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, pls. 10:1; 16:1.

63. Cohen, *Map of Sede-Boqer—West*, 67, fig. 4:3.

64. *Ibid.*, 67, fig. 4:4; see Majcherek, "Gazan Amphorae: Typology Reconsidered," 172, Form 4, dated late sixth to seventh century. The presence of this Gaza amphora (which is the only example published from Sde Boqer) suggests that occupation began before the end of the 7c (a pre-8c date might also be indicated by the wheelmade "Persian" oil lamp illustrated by Nevo, *Pagans and Herders*, PPL.7:12; see the discussion in n. 54 above).

65. M. Sharon, "Arabic Rock Inscriptions from the Negev," in *Ancient Rock Inscriptions: Supplement to Map of Har Nafha (196) 12–01* (Jerusalem: Israel Antiquities Authority, 1990) 9*; he notes that one even carries an exact date: 1st Dhu al Hijjah, A.H. 165 (17 July 782). Also see Avni, "Early Mosques in the Negev Highlands," 88–89.

Cohen surveyed another open mosque and settlement in the Sde Boqer area. The mosque is located on a hilltop near Nahal Hazaz. A settlement with seven dwellings lies in a plain to the west. In its center is a large three-room structure with an open courtyard.⁶⁶ None of the five sherds Cohen illustrated from the settlement is chronologically diagnostic.⁶⁷

Other Sites Excavated and Surveyed by Nevo

Nevo has illustrated pottery from the excavations and surveys he carried out at other farms (which he interpreted as “cultic” sites) in the central Negev highlands.⁶⁸ The area he surveyed covers 8 sq. km. The site of Avdat is located in the center of its northern segment, about one km south of the northern edge of the surveyed area. The southeast quarter of Nevo’s survey area overlaps with Y. Lender’s *Map of Har Nafha*.⁶⁹

Nevo classified the buildings (“house-like” structures) that he surveyed into three main groups: (1) BF-type structures; (2) BZ-type structures; and (3) UNIDS. UNIDS are “unidentified” structures, that is, any structure that does not, in Nevo’s opinion, exhibit distinctive features. BFs are small, single-roomed square buildings that always occur singly. BZs are usually rectangular buildings that may have more than one room. Nevo identified only one cluster of BZs, at his site HB (see below). Nevo identified both BFs and BZs as pagan shrines. He dated the BFs to the Byzantine period (fifth to sixth centuries) and the BZs to the early Islamic period (seventh to eighth centuries).⁷⁰ Though Nevo’s interpretation of these sites is far-fetched and incorrect, his chronology, based on the pottery he published, is roughly accurate. Most of this pottery comes from site HB, where BF 2, BF 3, BF 4, UNID 1, BZ1–4, and PC are located. These sites all lie on the eastern side of Har Eldad, on the west bank of a branch of Nahal Zin.

The Pottery

Most of the BF pottery Nevo illustrates comes from BF 2 (map ref. 12784.02016), BF 3 (map ref. 12792.02030), BF 4 (map ref. 12782.02038), and UNID 2 (which is located next to BF 4; map ref. 12782.02038).⁷¹ The proximity of these four structures suggests that they belong to a single farmstead. No coins were found. The illustrated, diagnostic pottery includes the following: Late Roman “C” (Phocean Red Slip) Ware Form 3 bowls, dated mainly from the mid-fifth to mid-sixth century;⁷² numerous Gaza amphoras, all of which have the low neck and rim characteristic of the mid-fifth through seventh centuries;⁷³ an imported amphora;⁷⁴ a cooking pot with a possible parallel from an assemblage of sixth- to early-seventh-century date from Caesarea;⁷⁵ cooking pots characteristic of the fifth to seventh centuries;⁷⁶

66. Cohen, *Map of Sede Boqer—East*, 65–67; the mosque is Site 107; the settlement is Site 108.

67. *Ibid.*, 67, fig. 3. The first four are labeled “cooking pots,” though no. 1 looks like it could be a storage jar. Its profile is similar to that of a storage jar in *ibid.*, 64, fig. 4:2, which comes from the Sde Boqer settlement. No. 2 looks like a large bowl or basin. No. 5 is a casserole lid. Cooking pot no. 4 resembles Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, pl. 16:1. For more on the mosque at Nahal Hazaz, see Avni, “Early Mosques in the Negev Highlands,” 89.

68. Nevo, *Pagans and Herders*; a map of his survey area appears on p. 12 (Map 0.2).

69. Y. Lender, *Map of Har Nafha (196) 12–01* (Jerusalem: Israel Antiquities Authority, 1990); see below.

70. Nevo, *Pagans and Herders*, 13.

71. *Ibid.*, 23–31; also see Map 0.2.

72. *Ibid.*, PPL.3:20, 21; see Hayes, *LRP*, 329–38.

73. *Ibid.*, PPL.1:1, 2, 5, 6–9, 15–18, 20; see Majcherek, “Gazan Amphorae,” Forms 3–4.

74. Nevo, *Pagans and Herders*, PPL.1:13; see Peacock and Williams, *Amphorae and the Roman Economy*, 185–87, Class 44, dated 5c to early 7c.

75. Nevo, *Pagans and Herders*, PPL.2:15; see Magness, “The Pottery from Area V/4,” fig. 1:15.

76. Nevo, *Pagans and Herders*, PPL.2:1, 3, 7, 6; see Magness, *JCC*, 219–20, Cooking Pots Form 4B.

a type of cooking pot found at 'Ein Boqeq in contexts dating from the mid-sixth to late seventh century;⁷⁷ and casseroles.⁷⁸ The other illustrated pieces from these structures include large, locally-produced bowls of fine, light brown-grey, sandy ware;⁷⁹ a storage jar of smooth, hard-fired, grey-brown ware;⁸⁰ a small jar;⁸¹ another jar or jug;⁸² and neck, shoulder, and base fragments of jugs and flasks.⁸³ The fifth to seventh century range for this assemblage indicates a Byzantine date for the farmstead.

Other pottery of the same date is illustrated from BF 22,⁸⁴ BF 40,⁸⁵ and Site HB.⁸⁶ It includes Late Roman "C" (Phocean Red Slip) Ware Form 3;⁸⁷ a Gaza amphora;⁸⁸ a bag-shaped jar with concretions adhering to the rim like those found on the Gaza amphoras;⁸⁹ a storage jar dated from the late sixth to seventh century;⁹⁰ and a type of cooking pot dated from the fifth to seventh centuries.⁹¹

The illustrated BZ pottery all comes from BZ 2 (including TB1, an associated "refuse concentration"; map ref. 12762.01991). BZ 2 consists of a rectangular structure divided into two rooms, with a courtyard in front. Eleven coins were found; all of those that could be identified are Umayyad postreform coins.⁹² The diagnostic sherds illustrated from BZ 2 and TB 1 are all early Islamic types. They include deep, hemispherical cups or bowls of eighth- to ninth-century date⁹³ and storage jars with swollen necks of hard-fired, brown ware.⁹⁴ There are also casseroles,⁹⁵ casserole lids,⁹⁶ and base fragments of two cooking pots.⁹⁷ It is interesting that Gaza amphoras, which are so common on the Byzantine farms, are completely absent from these early Islamic assemblages, as are Late Roman Red Wares. This assemblage thus appears to date to the eighth to ninth centuries.

Nevo noted that an identical ceramic and numismatic assemblage was found at nearby site PC, which is in the general area of site HB but in a side-branch of the wadi, not the main branch where the BZs are situated. The buildings at site PC are on the hillside close to the bed of Nahal Zin, like the BZs, and apparently date from the same period.⁹⁸ The map reference of Site PC (1278.0196) indicates that it might be identified with Lender's Site 44.⁹⁹ One of the two sherds published by Nevo from Site PC is a deep, hemi-

77. Nevo, *Pagans and Herders*, PPL.2:5; see Gichon, *En Boqeq: Ausgrabungen in einer Oase*, pl. 40:1–30. See Magness, "Redating the Forts at Ein Boqeq, Upper Zohar, and Other Sites," 189–206.

78. Nevo, *Pagans and Herders*, PPL.3:6.

79. *Ibid.*, PPL.3:23–24.

80. *Ibid.*, PPL.1:24; similar to Magness, *JCC*, 224–25, Storage Jars Forms 4B–C, dated 5c–7c.

81. Nevo, *Pagans and Herders*, PPL.2:18.

82. *Ibid.*, PPL.2:19.

83. *Ibid.*, PPL.2:20–23, 29.

84. *Ibid.*, PPL.1:14, 22, 25.

85. *Ibid.*, PPL.1:4.

86. *Ibid.*, PPL.2:2; PPL.3:22.

87. *Ibid.*, PPL.3:22; see n. 72 above.

88. *Ibid.*, PPL.1:4; see n. 73 above.

89. *Ibid.*, PPL.1:22; for a parallel from a 6c–early 7c context at Caesarea and discussion, see Magness, "The Pottery from Area V/4," 135, and fig. 3:4.

90. Nevo, *Pagans and Herders*, PPL.1:25; see Magness, *JCC*, 224–26, Storage Jars Form 4C.

91. Nevo, *Pagans and Herders*, PPL.2:2; see Magness, *JCC*, 219, Cooking Pots Form 4A.

92. Nevo, *Pagans and Herders*, 36–41.

93. *Ibid.*, PPL.3:18–19; see Magness, *JCC*, 196, FBW Bowls Form 1E.

94. Nevo, *Pagans and Herders*, PPL.1:10–11; Magness, *JCC*, 230–31, Storage Jars Form 7.

95. Nevo, *Pagans and Herders*, PPL.3:3–5.

96. *Ibid.*, PPL.3:7.

97. *Ibid.*, PPL.3:11–12.

98. *Ibid.*, 40.

99. Har Eldad, map ref. 12770 01960; see Lender, *Map of Har Nafha*, 20–22.

spherical cup or bowl.¹⁰⁰ The other is a storage jar whose profile and light slip point to an early Islamic (or later) date.¹⁰¹ Though Lender identified his Site 44 as Byzantine, the pottery he illustrates points to an early Islamic date.¹⁰² He described Site 44 as follows: “Structures and pens built on two levels, on wadi bank, covering an area of approximately two dunams. Six structures on upper level, adjacent to cave-mouths (today in a ruined state). On western side, a structure, 17 × 14 m. Another structure, 14 × 12 m, adjoins it; within, a room (8 × 6 m) and a courtyard. Another structure, 10 × 9 m, attached to above structure. Sixth and easternmost structure measures 16 × 9 m.; entrance from northeast. Elongated stone jambs flank entranceway, 1 m. in width. On lower level, two oval pens; 8 × 5 and 6 × 4 m. Most structures preserved to height of 2–3 courses, several reach a height of seven courses. Pottery: Byzantine. On nearby slope (map ref. 12760 01970), remains of three conduits; another in close proximity (map ref. 12760 01960). Agricultural terraces and conduits in nearby wadi (map ref. 12780 01970). Field of Tuleilat el-‘Anab on slope.”¹⁰³ The illustrated pottery includes two deep, hemispherical cups or bowls;¹⁰⁴ a cooking pot;¹⁰⁵ and a jug whose profile suggests that it might be buff (“Mefjer”) ware.¹⁰⁶ Based on the map references and pottery, Nevo’s site PC and Lender’s Site 44 appear to represent an eighth- to ninth-century farmstead.

Another ceramic assemblage is published by Nevo from ESC 1. ESCs, or Enclosed Small Catchments, refer to small, defined areas drained by hillside gullies, across which small walls or dykes have been built.¹⁰⁷ ESC 1 (map ref. 1258.0216) is located in the northwestern quarter of Nevo’s survey area. It consists of several small catchment areas on a chalk slope, each enclosed by a pair of low, semicircular stone walls. The walls extend into the gullies.¹⁰⁸ The illustrated pottery includes Gaza amphoras¹⁰⁹ and a jug whose brown slip points to a fourth- to fifth-century date.¹¹⁰ On the other hand, there is a hemispherical, locally-produced early Islamic cup with a horizontal band of combing.¹¹¹ The cooking pots could be Byzantine (fifth to seventh century) or early Islamic (eighth to ninth century).¹¹² This assemblage thus includes a mixture of Byzantine and early Islamic types, suggesting that this cultivated area was used during both periods.

Another relatively large ceramic assemblage is published from CCR 3, which is located in the middle of the western side of Nevo’s survey area.¹¹³ CCRs are “Constructed Caves/Rock Shelters.”¹¹⁴ The assemblage includes three deep, hemispherical cups or bowls;¹¹⁵ two casseroles;¹¹⁶ a casserole lid;¹¹⁷ and three cooking pots.¹¹⁸ This assemblage appears to be early Islamic in date.

100. Nevo, *Pagans and Herders*, PPL.3:15; see Magness, *JCC*, 196, FBW Bowls Form 1E.

101. Nevo, *Pagans and Herders*, PPL.1:21; the profile recalls Avissar, “The Medieval Pottery,” 152, fig. 13.120:9, Type 13, dated Crusader to Mamluke.

102. Lender, *Map of Har Nafha*, 20–22.

103. *Ibid.*, 10*–11*; for a plan of the site, see p. 22 (fig. 3); five pieces of pottery are illustrated on p. 21, fig. 2.

104. *Ibid.*, 21, fig. 2:1–2; Magness, *JCC*, 196, FBW Bowls Form 1E.

105. Lender, *Map of Har Nafha*, 21, fig. 2:3–4.

106. *Ibid.*, 21, fig. 2:5; see Avissar, “The Medieval Pottery,” 161, Types 10 and 11.

107. Nevo, *Pagans and Herders*, 74.

108. *Ibid.*, 75. The following pottery is illustrated from ESC 1: PPL.1:3, 12, 19, 23; PPL.2:8, 10, 16, 17, 24–28; PPL.3:8, 10, 19.

109. *Ibid.*, PPL.1:3, 12, 19; see n. 64 above.

110. *Ibid.*, PPL.2:24; see Magness, *JCC*, 185.

111. Nevo, *Pagans and Herders*, PPL.3:19; see n. 48 above.

112. *Ibid.*, PPL.2:8, 10; see Magness, *JCC*, 220, Cooking Pots Form 4C; compare no. 10 with PPL.5:13, from Sde Boqer.

113. Nevo, *Pagans and Herders*, 12, Map 0.2; PPL.2:11–13; PPL.3:1–2, 9, 13–14, 16.

114. *Ibid.*, 79; 80, fig. 2:29.

115. *Ibid.*, PPL.3:13, 14, 16; see Magness, *JCC*, 196, FBW Bowls Form 1E.

116. Nevo, *Pagans and Herders*, PPL.3:1–2.

117. *Ibid.*, PPL.3:9.

118. *Ibid.*, PPL.2:11–13; no. 11 resembles PPL.2:10, compared in n. 112 above with PPL.5:13 from Sde Boqer.

Finally, three cooking pot rims are illustrated by Nevo from Pit 1,¹¹⁹ in the northwestern quarter of Nevo's surveyed area (map ref. 1247.0210). Pit 1 consists of a group of three pits or cisterns in a row. The cooking pot in PPL.2:4 is apparently a Byzantine type.¹²⁰ The other two cooking pots could be either Byzantine or early Islamic.

Map of Sde Boqer East (168)

Cohen identified 45 sites in Survey Map 168¹²¹ as Byzantine, of which seven are agricultural settlements.¹²² He also dated most of the rock-hewn cisterns to this period. There is an early Islamic mosque (107) and settlement (108) (see above), while sherds identified by Cohen as early Islamic were found at nearby sites (80, 106). Rock engravings and inscriptions were discovered at sites 97 and 110. Cohen suggested that the concentration of early Islamic sites in the area of Kibbutz Sde Boqer is connected with the route of the Darb es-Sultan. The pattern of early Islamic settlement in the area seems to have paralleled Byzantine settlement, with some new settlements. According to Cohen, the occupation of these settlements ceased by the middle of the eighth century.¹²³

Although Cohen identified Sites 5, 9, 81, and 128 as Byzantine, and Site 93 as early Islamic, the pottery illustrated from these sites is not chronologically diagnostic.¹²⁴ Thus, the published evidence provides no basis for determining whether these sites are Byzantine (sixth to seventh century) or early Islamic (eighth to ninth century) or both.

Map of Sde Boqer West (167)

Cohen identified 40 of the sites he surveyed as Byzantine, including watchtowers, rock-cut cisterns, and seven settlements (53, 92, 101, 102, 106, 107, 119).¹²⁵ With one exception (92), all of the settlements are located in the vicinity of Nahal Besor, and include the agricultural terraces along this wadi and its tributaries. Cohen identified two Byzantine settlements (92, 106) where occupation continued into the early Islamic period.¹²⁶ As has been seen, however, the evidence from Nevo's excavations at Cohen's Site 92, which is the settlement at Sde Boqer, indicates that it was occupied only in the early Islamic period. As will be seen, Cohen's Site 106 is also early Islamic. Cohen noted that Site 92 is the largest settlement in the area, with 35 structures extending for about a kilometer along both sides of a tributary of Nahal Haro'a, in the neighborhood of Kibbutz Sde Boqer. Site 106 is another large settlement, consisting of about 20 structures. Cohen is probably correct that the settlements he surveyed and identified as Byzantine formed the agricultural mainstay of the Negev towns (Avdat, Shivta, Nessana, Elusa, and Rehovot).¹²⁷ However, the establishment of large agricultural settlements such as those at Sites 92 and 106 during the early Islamic period suggests that the occupation of the Negev towns continued through this period (see below).

119. *Ibid.*, PPL.2:4, 9, 14.

120. See n. 77 above, where *ibid.*, PPL.2:5 from UNID 2 is compared with a type found at 'Ein Boqeq.

121. Cohen, *Map of Sede Boqer—East*.

122. *Ibid.*, xi; Sites 5, 9, 12, 31, 73, 93, 109.

123. *Ibid.*

124. For Site 5, see *ibid.*, xvii and fig. 2 on p. 3; for Site 9, see *ibid.*, xvii and fig. 4 on p. 4; for Site 81, see *ibid.*, xxv and fig. 3 on p. 42; for Site 93, see *ibid.*, xxvi and fig. 3 on p. 52 (in the Hebrew text on p. 50, the pottery from this site is described as "Byzantine and Early Arab." However, the caption to fig. 3 on p. 52 reads "Byzantine," and in the introduction on p. xi, this site is described as Byzantine); for Site 128, see *ibid.*, xxx and fig. 1 on p. 78.

125. Cohen, *Map of Sede-Boqer—West*.

126. *Ibid.*, vii, xiii–xiv. The presence of the mosque (Site 94) on the hill overlooking the settlement indicated to Cohen continued occupation at the site.

127. *Ibid.*, xiv.

Sites with Illustrated and Chronologically Diagnostic Pottery¹²⁸

Site 53 (Nahal Besor). This is a settlement consisting of six structures, with a hewn cistern in the slope of the hill and agricultural terraces in the wadi. Cohen identified the pottery as Nabatean and Byzantine.¹²⁹ Of the six illustrated sherds, which are labeled Byzantine, the first is a red-slipped bowl rim, apparently either African Red Slip Ware Form 50B, dated ca. 350–400+, or African Red Slip Ware Form 64, dated early to mid-fifth century.¹³⁰ The other five pieces, though not chronologically diagnostic, are consistent with a fifth- to seventh-century date.

Site 55 (Nahal Besor). This is one structure. Cohen identified the pottery as Byzantine.¹³¹ The four illustrated sherds, which are labeled Byzantine, include three Gaza amphoras.¹³² All four pieces are consistent with a sixth- to seventh-century date.

Site 89 (Nahal Besor). These are the remains of structures on a hilltop with a hewn cistern to the east. Cohen identified the pottery as Early Bronze II–III, Iron Age, and Byzantine.¹³³ Of the eight illustrated sherds, only the last is labeled Byzantine. It is a cooking-pot type with a chronological range from the fifth or sixth century to late seventh or early eighth century.¹³⁴

Site 106 (Nahal Besor). This is a settlement with about 20 structures. Cohen identified the pottery as Byzantine and Early Arab.¹³⁵ The five illustrated sherds include a deep, hemispherical bowl and a storage jar with swollen neck.¹³⁶ All of these sherds, as well as Arabic inscriptions at the site, indicate an early Islamic (eighth- to ninth-century) date.¹³⁷ Excavations conducted at Cohen's Site 106 in 1987 by Y. Israel and D. Nahlili have confirmed that this is an early Islamic settlement.¹³⁸ Israel and Nahlili noted that the beds of the watercourses next to the site are dammed by agricultural terraces, with leveled rock surfaces used as threshing floors nearby.¹³⁹ They surveyed and excavated agricultural installations (silos, threshing floors, and animal pens) and 13 structures consisting of one or more rooms. The central building contains six rooms around an open courtyard. Four of these rooms were excavated. The local limestone was used for construction. Stone lintels more than one m long topped the doorways, and flagstones paved one of the rooms. Various installations, some of them for storage, were uncovered in the rooms. A rectangular room

128. The illustrated sherd profiles are not identified by type (e.g. cooking pot, storage jar, etc.). Site 34, consisting of a tower and cistern, is identified as Nabatean-Roman, Byzantine; *ibid.*, 8*. Of the seven sherds illustrated in fig. 2 on p. 22 (fig. 2), the first five are identified as Nabatean; the other two, both jars, are identified as Roman and Byzantine. The first is a holemouth jar with combed bands (no. 7); the second looks like an early Gaza amphora (no. 8; see Majcherek, "Gazan Amphorae," Form 1, dated 1c–3c). Thus, all of the pottery from this site looks early Roman. Site 121, consisting of an animal pen on a hilltop, is identified as Byzantine; Cohen, *Map of Sede-Boqer—West*, 28*. None of the five sherds illustrated in fig. 1 on p. 81 looks Byzantine or early Islamic. In my opinion, they appear to be early Roman.

129. Cohen, *Map of Sede-Boqer—West*, 13*.

130. *Ibid.*, fig. 6:1 on p. 38; see Hayes, *LRP*, 69–73, 110–11.

131. Cohen, *Map of Sede-Boqer—West*, 13*.

132. *Ibid.*, fig. 1:2–4 on p. 39; see Majcherek, "Gazan Amphorae," Form 4.

133. Cohen, *Map of Sede-Boqer—West*, 21*.

134. *Ibid.*, fig. 4:8 on p. 63; see Magness, *JCC*, 219–20, Cooking Pots Form 4B.

135. Cohen, *Map of Sede-Boqer—West*, 25*.

136. *Ibid.*, fig. 1 on p. 72. The first two are cups or bowls with parallels in the early Islamic assemblage from Nevo's excavations in the settlement at Sde Boqer; see Nevo, *Pagans and Herders*, PPL.6:1–5; for no. 3, see Magness, *JCC*, 196, FBW Bowls Form 1E, dated 8c–9c. For no. 5, see *ibid.*, 230–31, Storage Jars Form 7, dated late 7c to 9c/10c.

137. Cohen, *Map of Sede-Boqer—West*, 72, fig. 2.

138. Only a preliminary report has been published to date; see Y. Israel and D. Nahlili, "Nahal Besor," *Excavations and Surveys in Israel* 10 (1991) 159.

139. The Arabic inscriptions noted by Cohen are located on one of these threshing floors; *ibid.*

to the southwest of the central structure apparently served as a prayer hall. Its entrance is located in the northeast wall. A one-m-tall stela stood in the center of the room, opposite the entrance. A hollow on top of the stela was probably used to burn incense, and a surface for offerings at its foot was flanked by one course of stones.¹⁴⁰ The finds mentioned (but not illustrated) by Israel and Nahlieli include iron agricultural tools such as sickles and a plowshare, and pottery types “common from early Islamic sites.”¹⁴¹ They also refer to stone vessels (including steatite bowls), cast lead ornaments for wooden boxes, copper mirrors and cosmetic spoons, Umayyad coins, a personal lead seal bearing a three-line Arabic inscription, and animal bones. Israel and Nahlieli dated the village’s occupation to ca. 650–800, with its abandonment occurring at the beginning of the Abbasid period.¹⁴² However, the steatite bowls, the Arabic inscriptions, the Umayyad coins, and the pottery illustrated from Cohen’s survey of the site indicate that its occupation should be dated to the eighth to ninth centuries.¹⁴³ Thus, this settlement is contemporary with the larger one that Nevo excavated at Sde Boqer. The evidence for agricultural activity in and around these settlements indicates that the central Negev continued to be intensively cultivated during the eighth to ninth centuries.

The Arabic Inscriptions from Sde Boqer

M. Sharon published the Arabic inscriptions from Sde Boqer in appendices to Cohen’s two survey volumes,¹⁴⁴ and the Arabic inscriptions from the Negev highlands in a supplementary volume to Y. Lender’s survey map of Har Nafha.¹⁴⁵ Most of the several hundred inscriptions known to date consist of graffiti incised on rocky outcrops, often accompanied by depictions of animals such as camels, ibexes, and dogs.¹⁴⁶ Only a few carry dates: two from the vicinity of the mosque at Sde Boqer date to A.H. 165 (781/782),¹⁴⁷ while other examples from elsewhere date to A.H. 117 (735),¹⁴⁸ A.H. 119 (737/738; two inscriptions carry this date),¹⁴⁹ and A.H. 120 (739).¹⁵⁰ On the basis of the style of lettering, which is characteristic of the late Umayyad or early Abbasid established style, many others can be assigned to the late seventh to early eighth centuries.¹⁵¹ Most of the inscriptions are formulaic, opening with the words *allahumma ighfir* (“O, Allah forgive”), and containing the usual call asking Allah for forgiveness.¹⁵² According to Sharon, since the character of the names that appear in the inscriptions is Jahilite, and they lack typical Islamic expressions, they are not “Islamic” in the strict sense of the word. He uses this evidence to propose that traditional Islamic history was crystallized in an ordered and idealized manner only in the ninth century, long after the rise of the Islamic Empire, in the course of a violent struggle between different factions over basic ques-

140. *Ibid.*, with photo of this room in fig. 173. Though Israel and Nahlieli’s preliminary report appears in the bibliography, Avni does not include the “prayer hall” at the Nahal Besor settlement in his list of early Islamic mosques in the Negev highlands; Avni, “Early Mosques in the Negev Highlands.”

141. Israel and Nahlieli, “Nahal Besor.”

142. *Ibid.*

143. For steatite bowls, see Magness, “The Dating of the Black Ceramic Bowl.”

144. M. Sharon, “Appendix: Arabic Inscriptions from Sede Boqer,” in Cohen, *Map of Sede Boqer—East*, xxxi–xxxii; *idem*, “Appendix: Arabic inscriptions from Sede-Boqer—Map 167,” in Cohen, *Map of Sede-Boqer—West*, 31*–35*.

145. *Idem*, “Arabic Rock Inscriptions from the Negev,” 9*–35*; Lender, *Map of Har Nafha*.

146. *Idem*, “Arabic Rock Inscriptions from the Negev,” 9*.

147. *Ibid.*; see above.

148. *Ibid.*, 22*–24*.

149. *Ibid.*, 14*–16*, 20*; the former mentions the Umayyad Caliph Hisham b. ‘Abd el-Malik.

150. *Ibid.*, 25*. *Idem*, “Arabic Inscriptions from Sede-Boqer—Map 167,” also mentions inscription(s) dated to A.H. 112 (730).

151. *Idem*, “Arabic Inscriptions from Sede Boqer,” xxxi; *idem*, “Arabic Rock Inscriptions from the Negev,” 9*.

152. *Idem*, “Arabic Rock Inscriptions from the Negev,” 12*.

tions concerning its political and theological character. Sharon believes that Islam became an institutionalized religion only after the reforms of the Umayyad Caliph 'Abd el-Malek (685–705). This means that traditional Islamic history is more a reflection of the political, military, and ideological tension of early Islam than a factual account of its true stages of development.¹⁵³ Whitcomb has noted that the revisionist approach and ideological program characteristic of Nevo's interpretations underlie Sharon's theories as well. Sharon uses negative evidence (such as the lack of typical Islamic expressions in the Negev inscriptions) to argue that Islam did not develop as a unifying religious concept before the time of 'Abd el-Malek.¹⁵⁴

Though the handful of dated inscriptions falls within the years 735–82, on the basis of paleography Sharon concluded that the hundreds of undated examples range in date from the seventh to ninth centuries. However, he emphasized the early end of this chronological range to support his view that the Negev settlements and farms declined after the beginning of the Abbasid period: "The shift of the Empire's centre to the east and the 'Abbasid's intentional neglect of Syria—a process not commenced immediately, but protracted and never reversed—resulted in the gradual abandonment of many settlements on the desert fringes. I believe that most of the agricultural settlements built by the Arabs in the Negev existed for a relatively short period, from the reign of Mu'awiyah I (661–680 C.E.) until that of al-Mahdi (775–85 C.E.)—some 100 years at the most."¹⁵⁵ Lowering the chronology enabled Sharon to conclude that, "... the inscriptions provide early archaeological evidence of the existence of Arabs in the Negev, and since the dating of this graffiti material is very difficult, it is possible that these Arabs were living in the area in the first fifty years of the seventh century, before the massive Arab invasion which included 'Believers,' and possibly even earlier. Regardless, the inscriptions show the beginning of a long process of Arabization in the country before Islam, which occurred in stages over an extended period."¹⁵⁶ He suggested that this Arab penetration in Syria and Palestine followed the weakening of Byzantine authority. This put the Arabs in an ideal position to take over the country without the fierce battles described in the Islamic tradition.¹⁵⁷ Sharon's conclusions are contradicted by the evidence surveyed in this chapter, which attests to a much more complex settlement process in the Negev and elsewhere in southern Palestine. Some farms and settlements date solely or mainly to the Byzantine period; occupation at others continued without interruption into the early Islamic period; and new farms and settlements were established during the course of the eighth to ninth centuries. The epigraphic evidence indicates that some of these sites flourished well after the beginning of the Abbasid period. For example, the dated inscriptions under the mosque at Sde Boqer provide a terminus post quem, not a terminus ante quem in the reign of al-Mahdi for its construction. Sharon's assignment of other inscriptions to the eighth to ninth centuries accords well with the ceramic and numismatic evidence from the early Islamic settlements and farms.¹⁵⁸ On the other hand, his claim that the inscriptions attest to a long process of Arabization of the Negev, beginning in the seventh century, is an argument from silence, since none of the dated examples antedates the second quarter of the eighth century.

153. *Ibid.*, 12*; *idem*, "Arabic Inscriptions from Sede-Boqer—Map 167," 31*–34*.

154. Whitcomb, "Islam and the Socio-cultural Transition of Palestine," 501.

155. Sharon, "Arabic Rock Inscriptions from the Negev," 11*.

156. *Idem*, "Arabic Inscriptions from Sede-Boqer—Map 167," 34*.

157. *Ibid.*, 33*–34*. For a decline in Syria–Palestine before the Muslim conquest, see chap. 9 below: "Did Syria–Palestine Decline in the Mid–Sixth Century?"

158. *Idem*, "Arabic Rock Inscriptions from the Negev," 30*–31* (Sites 90, 103); 32* (Site 238). Another inscription is dated on the basis of paleography to the late ninth century (*ibid.*, 13*; Site 12). The fact that the letter forms of one inscription that carries the date A.H. 117 (735) look much earlier calls into question the reliability of dating on the basis of paleography alone (see *ibid.*, 22*). Could it be that new letter forms penetrated remote desert regions slowly, and that some of the undated inscriptions are later than Sharon supposed?

Other Mosques in the Northern and Central Negev

Avni has described 12 mosques in the northern and central Negev, to the north and south of the Ramon Crater.¹⁵⁹ He notes that the type of construction in each area resembles that of the dwellings in the associated settlements: a more solid, roofed structure near the agricultural settlements of the lowlands and central highlands, and a less permanent, open structure in the region inhabited by seminomads in the southern highlands.¹⁶⁰ Covered mosques have been found in the town of Shivta and at the Nahal La'ana farm (see below). Open mosques have been found at Sde Boqer (see above), Nahal Hazaz (see above), Ramat Barnea, Horvat Sharav, Be'er Karkom, Nahal Arod, Nahal Oded (see below), Har Oded (see below), and Bor Batur. Most of the mosques sit on hilltops near the settlement, usually a few dozen meters from the dwellings. Only those at Shivta, Nahal La'ana, and Ramat Barnea are located within the residential areas. The only mosque not directly associated with a settlement is that at Bor Batur, which was probably used by travelers.¹⁶¹ Because he believes that the farms and settlements with which these mosques are associated were established during the Byzantine period (sixth century), Avni argues that the mosques were constructed during the final phase of occupation at these sites.¹⁶² As the cases of Sde Boqer and Nahal Besor illustrate, however, at least some of these settlements and farms were established no earlier than the late seventh century. Nonetheless, Avni is correct that the archaeological evidence indicates that the Negev mosques were not constructed before the eighth century.

The Farm and Mosque at Nahal La'ana

This site is located at the foot of Har Qemer, just south of Nahal La'ana, in the western Negev highlands.¹⁶³ D. Nahlieli and Y. Israel surveyed the site in 1979 and conducted salvage excavations in 1987. Six structures are spread over an area of 1.8 hectares, with a nearby complex of agricultural terraces and dams. There are numerous Arabic rock inscriptions in this area. Nahlieli and Israel conducted excavations in the main building (Area A), which had a spacious courtyard surrounded on three sides by nine rooms. Its limestone block walls were covered with plaster. The excavators suggested that Rooms 2 and 10, on the north side of the courtyard, constituted the core of the structure, and that the other rooms were gradually added.¹⁶⁴ Room 1, on the south side of the courtyard, had an entrance in its east wall and a mihrab in the center of its south wall, flanked by two large stones. The mihrab appears to have been cut into the already existing south wall of the room. Room 1 had a floor of crushed limestone laid on a fill of earth and stones. Fallen stones and the remains of the roof lay on the floor. The roof consisted of rough plaster made of loess mixed with organic material, laid on wooden beams and tree branches. No sherds or other finds were discovered on top of the floor of this room. Two superimposed floors were found in Rooms 2 and 4, on the

159. Avni, "Early Mosques in the Negev Highlands." He does not include the "prayer hall" in the early Islamic settlement at Nahal Besor; see Israel and Nahlieli, "Nahal Besor."

160. Avni, "Early Mosques in the Negev Highlands," 91–92.

161. *Ibid.*, 91.

162. *Ibid.*, 92–94.

163. For the preliminary report, see D. Nahlieli and Y. Israel, "Nahal La'ana," *Excavations and Surveys in Israel* 7–8 (1988–89) 140–41; for the final report, see D. Nahlieli, Y. Israel, and Y. Ben-Michael, "The Nahal La'ana Site: An Early Islamic Farm in the Negev," *Atiqot* 30 (1996) 67*–78* (in Hebrew, with English summary on p. 130).

164. This suggestion appears to be based on structural rather than stratigraphic evidence, as can be seen from the seams in the walls indicated in the plan of the structure (Nahlieli et al., "The Nahal La'ana Site," 69*). However, it is impossible to determine whether these additions represent different chronological phases or are just constructional in nature. The latter possibility is suggested by the fact that both Rooms 2 and 4 had two superimposed floors, though in the plan Room 4 appears to have been built up against (or added onto) Room 2.

north side of the courtyard. In both rooms the earlier and later floors were covered by layers of ash, apparently reflecting two separate destructions. A heap of ashes (L25) was discovered on the surface of the ground to the east of this building. The finds from this dump and from the rooms in the building included pottery, coins, lead ornaments, bronze cosmetic utensils, an iron nail, animal bones, and shells. A coin of Heraclius (610–40) was found between the two floors in Room 2 in the main building. Eight more coins, recovered from the dump (L25), included one Umayyad Byzantine-Arab prereform coin, one Umayyad postreform coin, four unidentified lead coins that may be Abbasid, an unidentified Abbasid coin from Egypt, and an Abbasid coin of 802–3.¹⁶⁵ Radiocarbon analyses of organic materials yielded the following dates: 540 cal. C.E. for a sample from the lower floor of Room 2 in Structure A; 668–773 cal. C.E. for a sample from Room 1; and 893–978 cal. C.E. for a sample from the upper floor of Room 2.¹⁶⁶

Only 27 sherds were recovered in the excavations, about half of which were cooking vessels, and a third were storage jars and jugs.¹⁶⁷ The illustrated, chronologically diagnostic fragments include two early Islamic deep, hemispherical cups or bowls,¹⁶⁸ a Fine Byzantine Ware juglet,¹⁶⁹ one jug and one jar of early Abbasid “Mahesh” ware,¹⁷⁰ and an early Islamic storage jar with a tall, slightly swollen neck.¹⁷¹ The only lamp fragment recovered belongs to an early channel-nozzle lamp.¹⁷² Though the excavators proposed a seventh- to eighth-century date for this farm, the ceramic and numismatic evidence and radiocarbon dates indicate a late-seventh- to ninth-century range for its occupation.¹⁷³

Map of Har Nafha (196)

The area covered by the Map of Har Nafha¹⁷⁴ is located between the ancient town of Avdat and the modern town of Mizpeh Ramon, mostly west of the Be'er-sheva^c–Mizpeh Ramon road. This section of Ramat Avdat rises to a height of 600–700 m above sea level. Ramat Matred is located in its northwest sector, and the Nafha Range and Har Nafha (846 m above sea level) lie in the south. The area is drained by three main wadis: Nahal Zin, Nahal Yeter, and Nahal Avdat. Arable land is generally found in the riverbeds and floodplains of the larger wadis, which contain hundreds of agricultural terraces. Settlements are concentrated on the wadi banks and the slopes of the nearby spurs.¹⁷⁵ Lender noted that the number of sites he

165. The coins were published by A. Berman in Nahlieli et al., “The Nahal La‘ana Site,” 73*–74*.

166. Nahlieli et al., “The Nahal La‘ana Site,” 130; Y. Carmi and D. Segal in *ibid.*, 75*–76*.

167. All of the diagnostic sherds are illustrated in *ibid.*, fig. 9:1–15.

168. *Ibid.*, fig. 9:1–2; see Magness, *JCC*, 194–96, FBW Bowls Form 1E, dated 8c–9c. The horizontal combed band on the latter piece suggests that it is a local variant of this type. This piece comes from the fill of the floor in Room 1 and thus provides an early 8c terminus post quem for that floor.

169. Nahlieli et al., “The Nahal La‘ana Site,” fig. 9:10; see Magness, *JCC*, 240, FBW Jars, Jugs, and Juglets Form 2A, dated mid–6c to late 7c/early 8c.

170. Nahlieli et al., “The Nahal La‘ana Site,” fig. 9:11–12; see D. Whitcomb, “Mahesh Ware: Evidence of Early Abbasid Occupation from Southern Jordan,” *Annual of the Department of Antiquities of Jordan* 33 (1989) 269–85, dated ca. 750–800 or later.

171. Nahlieli et al., “The Nahal La‘ana Site,” fig. 9:14; see Magness, *JCC*, 230–31, Storage Jars Form 7, dated late 7c to 9c/10c.

172. Nahlieli et al., “The Nahal La‘ana Site,” fig. 9:15; see Magness, *JCC*, 256, Oil Lamps Form 4A, no. 2, dated 7c to early 8c.

173. Nahlieli and Israel, “Nahal La‘ana,” 141; Nahlieli et al., “The Nahal La‘ana Site,” 76*. It is worth noting that the less chronologically diagnostic pottery illustrated from this site, which consists mainly of cooking pots, casseroles and casserole lids, and storage jars (*ibid.*, fig. 9:3–9, 13), includes the same types common at the Negev farms usually dated to the Byzantine period.

174. Lender, *Map of Har Nafha*.

175. *Ibid.*, xv.

identified as Byzantine (233) versus early Islamic (12) is misleading, since the difficulty of dating the associated pottery types means that many of the Byzantine sites could be early Islamic instead.¹⁷⁶

Significant early Islamic presence in this region is indicated by the numerous Arabic inscriptions of seventh- to early-tenth-century date.¹⁷⁷ These are concentrated in a small area in the northwest corner of the map, north of Nahal Avdat.¹⁷⁸

*Sites with Illustrated and Chronologically Diagnostic Pottery*¹⁷⁹

Site 18 (Nahal Avdat). This site consists of caves, structures, and a cistern. There are agricultural terraces in the nearby wadi and a field of Tuleilat el-ʿAnab. Lender identified the pottery as Byzantine.¹⁸⁰ The six illustrated sherds include a Fine Byzantine Ware bowl and a Gaza amphora, both characteristic of the sixth to seventh centuries.¹⁸¹

Site 25 (Nahal Avdat). This site consists of structures and pens. Lender identified the pottery as Byzantine.¹⁸² The seven illustrated sherds include one bowl that may be of mid-sixth- to seventh-century date, and another that appears to be early Islamic.¹⁸³ There is also the nozzle of a wheelmade, “Persian” oil lamp of sixth- to seventh-century date.¹⁸⁴ The pottery thus points to a sixth- to seventh-century date for this site, with a possible continuation of occupation into the eighth to ninth centuries.

Site 34 (Har Eldad). This is a large rectangular building consisting of six rooms along one side of a courtyard. Lender identified the pottery as Byzantine.¹⁸⁵ Of the four illustrated sherds, a storage jar with swollen neck points to an early Islamic (eighth- to ninth- or tenth-century) date for the occupation of this site.¹⁸⁶

Site 40 (Har Eldad). This site consists of pens and structures comprising rooms and courtyards. Lender identified the pottery as Byzantine and early Islamic.¹⁸⁷ The first of the five illustrated sherds may

176. *Ibid.*, xxiii–xxv.

177. Sharon, “Arabic Rock Inscriptions from the Negev”; also see discussion above.

178. Lender, *Map of Har Nafha*, xviii, suggested that the concentration of inscriptions in this area may be due to the presence of a sheikh’s tomb, who, according to the local Bedouin was one of Muhammad’s companions killed during the Muslim conquest. It is possible, however, that the site was considered holy even during the early Islamic period and that the inscriptions were carved by pilgrims visiting the tomb.

179. The illustrated pottery from the following sites, which were identified by Lender as Byzantine, is not chronologically diagnostic: 52, 80, 89, 95, 108, 209, 213, 216, 246, 361, 402, 415, 495. Much of this pottery consists of cooking pot and storage jar types that have ranges from the 6c–8c. This is also true of the sites from which chronologically diagnostic types are illustrated. This means that sites identified here as Byzantine or early Islamic on the basis of the presence of chronologically diagnostic types could have a longer range (that is, given the very limited evidence, occupation could date from the 6c–8c, even when the only diagnostic sherds published are just Byzantine or early Islamic).

180. Lender, *Map of Har Nafha*, 5*.

181. The bowl is illustrated in *ibid.*, 9, fig. 1:1; see Magness, *JCC*, 193–95, FBW Bowls Form 1B. The Gaza amphora is illustrated in Lender, *Map of Har Nafha*, 9, fig. 1:6; see Majcherek, “Gazan Amphorae,” Form 4.

182. Lender, *Map of Har Nafha*, 6*.

183. For the first, see *ibid.*, 11, fig. 1:2; without a description of the fabric, it is impossible to identify this piece with certainty; see Magness, *JCC*, 193–95, FBW Bowls Form 1B. For the second bowl, see Lender, *Map of Har Nafha*, 11, fig. 1:3; this appears to be a local variant of Magness, *JCC*, 196, FBW Bowls Form 1E, dated 8c–9c.

184. Lender, *Map of Har Nafha*, 11, fig. 1:7; see Magness, *JCC*, 129.

185. Lender, *Map of Har Nafha*, 8*.

186. *Ibid.*, 15, fig. 2:4; see Magness, *JCC*, 230–31, Storage Jars Form 7.

187. Lender, *Map of Har Nafha*, 9*.

be a Gaza amphora.¹⁸⁸ There is also an oil lamp that may represent a type of seventh- to early-eighth-century date.¹⁸⁹ This pottery suggests a sixth- to seventh-century date for this site.

Site 41 (Har Eldad). This site consists of a cave with three pens and two oval structures nearby. Lender identified the pottery as Byzantine.¹⁹⁰ The only chronologically diagnostic piece of the five illustrated sherds is a Gaza amphora of sixth- to seventh-century date.¹⁹¹ However, the storage jars have the tall necks characteristic of a late-sixth or seventh- to eighth-century date,¹⁹² while another piece appears to represent an early Islamic flask.¹⁹³ This pottery points to a sixth- to eighth- or ninth-century range for this site.

Site 44 (Har Eldad). See the discussion of Nevo's Site PC above.

Site 92 (Nahal Zena'). This is a structure on a wadi bank with walls of dressed stones. A rectangular pen and two square structures lie nearby. Lender identified the pottery as Byzantine and early Islamic.¹⁹⁴ The five illustrated sherds include the handle of an Abbasid period, buff ("Mefjer") ware jug with an applied knob of clay on top.¹⁹⁵ This piece indicates early Islamic occupation at this site.

Site 96 (Nahal Zena'). These are structures and pens on a hillside identified as Iron II and Roman.¹⁹⁶ However, the last of the eleven sherds illustrated from this site is a Gaza amphora dated ca. 450–600.¹⁹⁷

Site 114 (Nahal Zin). These are the remains of structures and pens on the northwest bank of Nahal Zin. Enclosed agricultural fields and more structures are located nearby. Lender identified the pottery as Byzantine and early Islamic.¹⁹⁸ The 12 illustrated sherds include clearly Byzantine types: a bowl of mid-sixth to seventh-century date,¹⁹⁹ a fifth-century Late Roman Red Ware bowl,²⁰⁰ and a type of basin characteristic of southern Palestine in the sixth to seventh centuries.²⁰¹ The early Islamic types include a storage jar with swollen neck²⁰² and an oil lamp.²⁰³ This pottery attests to occupation of the site during the fifth to eighth centuries or later.

188. Lender, *Map of Har Nafha*, 19, fig. 4:1; see Majcherek, "Gazan Amphorae," Form 4? Because of this piece's unusual profile, it is impossible to establish a definite identification without a description of the ware.

189. Lender, *Map of Har Nafha*, 19, fig. 4:5; see Magness, *JCC*, 256, Oil Lamps Form 4B. For a shoulder design consisting of two rows of radiating lines, instead of one row of lines and one row of dots, encircling the filling hole, see Rosenthal and Sivan, *Ancient Lamps*, 132, no. 540.

190. Lender, *Map of Har Nafha*, 10*.

191. *Ibid.*, 20, fig. 1:5; see Majcherek, "Gazan Amphorae," Form 4.

192. Lender, *Map of Har Nafha*, 20, fig. 1:2, 4; see Magness, *JCC*, 227–30, Storage Jars Form 6.

193. Lender, *Map of Har Nafha*, 20, fig. 1:1; see Nevo, *Pagans and Herders*, PPL.6:6–9, with discussion in n. 52 above.

194. Lender, *Map of Har Nafha*, 21*.

195. *Ibid.*, 41, fig. 1:5; see Avissar, "The Medieval Pottery," 162, type 12, dated early Islamic; Sauer and Magness, "Ceramics of the Islamic Period," 477–78.

196. Lender, *Map of Har Nafha*, 22*.

197. *Ibid.*, 42, fig. 1:11; see Majcherek, "Gazan Amphorae," Form 3.

198. Lender, *Map of Har Nafha*, 53; no dates are provided in the English text (*ibid.*, 26*). Of the twelve sherds illustrated in fig. 6 on p. 57, nos. 1–6 are identified as Byzantine, and nos. 7–12 are identified as early Islamic.

199. *Ibid.*, 57, fig. 6:1; see Magness, *JCC*, 195, FBW Bowls Form 1B.

200. Lender, *Map of Har Nafha*, 57, fig. 6:2; see Hayes, *LRP*, 110–11, African Red Slip Ware Form 64, no. 3, dated early to mid-5c.

201. Lender, *Map of Har Nafha*, 57, fig. 6:7; see Magness, *JCC*, 160.

202. Lender, *Map of Har Nafha*, 57, fig. 6:10; see Magness, *JCC*, 230–31, Storage Jars Form 7, dated late 7c to 9c/10c; also see G. J. Wightman, *The Damascus Gate, Jerusalem: Excavations by C.-M. Bennett and J. B. Hennessy at the Damascus Gate, Jerusalem, 1964–66* (BAR International Series 519; Oxford: BAR, 1989) 227, fig. 41:14, from an early Islamic context (see p. 27).

203. Lender, *Map of Har Nafha*, 57, fig. 6:12. This is either a channel-nozzle oil lamp (see Magness, *JCC*, 258, Oil Lamps Form 5, dated 8c–10c) or a variant of an early channel-nozzle lamp (see *ibid.*, 255–58, Oil Lamps Form 4A; compare with Nevo, *Pagans and Herders*, PPL.7:7).

Site 214 (Nahal Zenaʿ). Lender identified the pottery from this square structure as Nabatean and Roman.²⁰⁴ The first of the three illustrated sherds is a painted Nabatean bowl of early Roman date, while the last is a Gaza amphora of the late sixth to seventh centuries.²⁰⁵

Site 231 (Nahal Zin). These are the remains of a settlement on both sides of a wadi. The last four illustrated sherds, which are identified as Byzantine, include two Gaza amphoras of late sixth- to seventh-century date.²⁰⁶ These attest to Byzantine occupation at this site.

Site 233 (Nahal Zin). This is a structure on a hilltop consisting of five rooms, in which two building stages can be distinguished. Pens, installations, and agricultural terraces are located nearby. Lender identified the pottery as Byzantine.²⁰⁷ The ten illustrated sherds include rilled-rim basins²⁰⁸ and Gaza amphoras.²⁰⁹ They point to a fourth- to fifth-century date for the occupation of this site.

Site 446 (Nahal Zin). These are the remains of a settlement spread over a length of 100 m. Lender identified the pottery as Byzantine and early Islamic.²¹⁰ The four illustrated sherds include Gaza amphoras of late sixth- to seventh-century date.²¹¹

Site 454 (Nahal Yeter). This site consists of pens and a two-room structure. Lender identified the pottery as Byzantine.²¹² The last of the four illustrated sherds might be a bowl of mid-sixth to seventh-century date.²¹³

Nahal Mitnan

One example of an excavated farm in the Negev highlands is in Nahal Mitnan, about 30 km west of Mizpeh Ramon, in Ramat Barnea. Four farms were surveyed along the 4-km-long wadi by M. Haiman, who conducted excavations in one of them.²¹⁴ The farm included the main farmhouse (A), an agricultural installation (B), a semisedentary structure (C), a threshing floor (D), and a section of the terraced wadi-channel, enclosed by a stone fence (E). The farmhouse complex measures 15 × 33 m. Architectural elements included roughly hewn lintels, thresholds, and door jambs. A charred beam found in one room suggests that the roof was made of wood. The structure was composed of separate dwelling units, each consisting of one to three rooms and a small courtyard. Three units can be distinguished: one includes Room 102 and Courtyard 101; another includes Rooms 103, 104, 105, and 106 and Courtyard 100; and the third, only partly excavated, contains Rooms 108 and 110 and Courtyard 109. The entrance to the dwelling compound was on the eastern side. A narrow wall abutting the compound on the eastern side apparently demarcated an outer courtyard (L111), much larger than the courtyards inside the structure. The outer courtyard may have been used for activity related to the collection of crops before storage or transport, as

204. Lender, *Map of Har Nafha*, 50*; 100, fig. 1.

205. *Ibid.*, 100, fig. 1:3; see Majcherek, "Gazan Amphorae," Form 4.

206. Lender, *Map of Har Nafha*, 54*–55*; 109, fig. 4:14–15; see Majcherek, "Gazan Amphorae," Form 4.

207. Lender, *Map of Har Nafha*, 55*.

208. *Ibid.*, 112, fig. 4:3–4; see Magness, *JCC*, 203, dated late 3c/early 4c to 6c. The limited distribution of the Jerusalem rilled-rim basins suggests that these examples may be related but do not represent exactly the same type.

209. Lender, *Map of Har Nafha*, 112, fig. 4:6–10; nos. 9–10 correspond with Majcherek, "Gazan Amphorae," Form 2, dated ca. 300–450; the others appear to antedate the 6c as well.

210. Lender, *Map of Har Nafha*, 102*.

211. *Ibid.*, 188, fig. 3:3–4 (no. 2 might also be a Gaza amphora); see Majcherek, "Gazan Amphorae," Form 4.

212. Lender, *Map of Har Nafha*, 104*.

213. *Ibid.*, 191, fig. 1:4; see Magness, *JCC*, 195, FBW Bowls Form 1B.

214. Haiman, "An Early Islamic Period Farm at Nahal Mitnan," 1–13. Haiman refers to the farm he excavated as the Nahal Mitnan farm.

well as for sheltering draft or pack animals.²¹⁵ In the northern unit, Courtyard 101, with a beaten earth floor containing fragments of pottery and glass, led to Room 102. The beaten earth floor of Room 102 yielded potsherds, a stone bowl, a mortar, and two hammerstones. The central unit was entered through Courtyard 100. Its earthen floor was covered by a thick (1.0 m) layer of ash. The finds include pottery, glass, bones, fragments of grindstones and millstones, and a marble slab. Rooms 103 and 106 both contained raised beaten-earth platforms bordered by a row of stones, one course high, which may have served as beds. Finds from Room 103 include a glass weight bearing the name of 'Abd el-Malek b. Yazid found near the southern edge of the platform, pottery, and a charred wooden beam. Most of the fine pottery found on the site comes from the platform in Room 106: an oil lamp, a complete bowl, and fragments of fine bowls. Other finds from the room include potsherds, bones, ostrich egg shells, a fragment of a millstone, and a piece of iron. A pile of ash about 0.5 m high was found between the edge of the platform and the wall. Room 105 had a slightly sunken beaten-earth floor covered by a layer of ash about 0.1 m thick. Finds include fragments of grindstones, pieces of iron, bones, and a fragment of a seashell. Room 104 abuts the external walls of Rooms 105 and 103 and may be a late addition to the structure. The room has no visible entrance. Similar rooms in other central Negev farmhouses, interpreted by Nevo as ritual installations, were probably granaries that had an opening in the upper part of the wall.²¹⁶ Room 104 yielded numerous potsherds, a juglet, a stone bowl, pieces of iron, animal bones, a clay stopper, fragments of glass, four hammerstones, two grinding stones, a marble slab, and a millstone. The wealth of finds suggests that in its final stage the room served as a dump. In the southern unit, which lay at a significantly higher elevation than the other parts of the compound, only Room 108 was excavated. Courtyard 109 is higher than Courtyards 100 and 101. It was poorly built and badly preserved, and may have been a late addition or an area used for work and storage. Room 108 had no entrance and may have been used for storage.²¹⁷

Installation B (not excavated), attached to a structure on a hilltop overlooking the farm, consists of a ring of stones and elongated cells. It may be a fruit-drying installation.²¹⁸ Installation D is an earthen threshing floor. Structure C includes two rectilinear rooms and several curvilinear ones, perhaps added at a later stage.²¹⁹

About 450 sherds were recovered in the excavations at Nahal Mitnan, one-third of which were cooking pots and over half of which were storage jars.²²⁰ Two Late Roman Red Ware bowls were found at Nahal Mitnan, neither of which is identified by Haiman, and only one of which is illustrated. It should be assigned a seventh-century date.²²¹ Other chronologically diagnostic pieces include early Islamic cups or

215. *Ibid.*, 1–3.

216. *Ibid.*, 4; Haiman notes that no granaries have been identified to date in the Negev highland farms, despite the prevalence of terraced wadis and threshing floors.

217. *Ibid.*, 4–5.

218. *Ibid.*, 5.

219. *Ibid.* Haiman suggested that Structure C could represent the dwelling of a family of seminomads engaged in seasonal herding in the stubble fields or occasional farm work. Alternatively, it may reflect a stage in the transition from tent to house, during which some members of nomadic families continued to dwell in temporary structures, while others, usually younger, moved to permanent houses nearby. This stage is common among seminomads undergoing a process of sedentarization and could indicate a seminomadic origin for the farm dwellers in the Negev highlands.

220. *Ibid.* The pottery is illustrated in fig. 8 on p. 7, with descriptions on p. 6.

221. *Ibid.*, fig. 8:8. The ware is described as “fine pink-red clay, well fired, finger smears outside” (p. 6). The rim profile resembles Late Roman “C” (Phocean Red Slip) Ware Form 10C, dated early to mid-7c (see Hayes, *LRP*, 344–46). However, the description of the fabric is suggestive of Egyptian Red Slip “A” Ware (see *ibid.*, 387–97). Hayes noted that the fragments of this ware found at Nessana dated mainly to the 7c. The flat base also points to ERS A ware, which is attested in some examples, as opposed to LRC 10, which has a low ring base.

bowls of fine, hard-fired, brown ware, some of which have black painted designs over a white slip.²²² The swollen necks and and hard-fired, light brown metallic ware or coarse, dark red-brown ware of the storage jars are consistent with an early Islamic date.²²³ Haiman also notes the presence of jars made of fine, light grey or light green clay, which apparently represent early Abbasid Mahesh ware.²²⁴ There is also an intact early channel-nozzle oil lamp of seventh- to early-eighth-century date.²²⁵ Finally, there is a fragment of an eighth- to ninth-century black stone bowl.²²⁶

Other finds include an Umayyad postreform coin from L114, and a glass weight that bears the name of ‘Abd el-Malek b. Yazid, the governor of Egypt, dating to his first term of office (751–53).²²⁷ Finally, Carbon 14 analysis of the charred beam from L103 yielded two dates in the fifth to seventh centuries.²²⁸

The ceramic, numismatic, and other evidence from Nahal Mitnan suggests that the farm was occupied from the seventh to eighth or ninth centuries. It is impossible to determine whether it was established before or after the Muslim conquest.

Map of Har Hamran—Southwest (198)

The Nahal Mitnan farm is located in the area of Haiman’s survey map of Har Hamran Southwest.²²⁹ This region, which forms part of Ramat Barnea, lies some 30 km west of Mizpeh Ramon. Ramat Barnea is a plateau about 600 m above sea level, bordered on the north and south by mountain ranges. The hilly terrain is dissected by wadis draining mainly from south to north. The springs of ‘Ain el-Qudeirat and ‘Ain Qadeis lie on the western edge of Ramat Barnea. Slightly to the west, the plateau ends abruptly in a cliff rising 20–100 m above the north Sinai plateau.²³⁰ Haiman identified approximately 170 Byzantine and early Islamic sites, including farms, agrarian installations, and encampments. Twenty-six farms and dozens of accompanying installations were surveyed, mainly on the edge of terraced wadis. The construction of the farmhouses is of excellent quality, and they have uniform ground plans. Haiman distinguished three farm types: (1) Single-structure farms, which have a square ground plan and include one to three rooms.²³¹ (2) Farms in which the structures are connected to the wadi by a wall; the dwellings are combinations of two to four “single structures” of Type 1. The farm of Site 253 is the largest in this class. These farms are generally connected to the nearby wadi by walls interlocking with those of the dwellings. They enclose segments of the wadi adjacent to the farms. The end of the wall crosses the wadi perpendicularly, becoming a dam, and was incorporated into the wadi terrace system. (3) Farms with a large concentration of structures. These were mainly established on the wadi banks. Here too, one can distinguish combinations of 6–10

222. Haiman, “An Early Islamic Farm at Nahal Mitnan,” 7, fig. 8:1–2, 4–7; see Magness, *JCC*, 196, FBW Bowls Forms 1D and 1E, dated late 7c to 9c/10c, and 8c–9c, respectively. fig. 8:3 is a local imitation of one of these early Islamic FBW bowls, made of coarse reddish clay with a bright grey-cream slip.

223. Haiman, “An Early Islamic Farm at Nahal Mitnan,” 7, fig. 8:15–19; see Magness, *JCC*, 230–31, Storage Jars Form 7, dated late 7c to 9c/10c.

224. Haiman, “An Early Islamic Farm at Nahal Mitnan,” 8; fig. 8:21; see Whitcomb, “Mahesh Ware.”

225. Haiman, “An Early Islamic Farm at Nahal Mitnan,” 7, fig. 8:22; see Magness, *JCC*, 255–56, Oil Lamps Form 4B.

226. Haiman, “An Early Islamic Farm at Nahal Mitnan,” 7, fig. 8:23; see Magness, “The Dating of the Black Ceramic Bowl.”

227. Haiman, “An Early Islamic Farm at Nahal Mitnan,” 8.

228. *Ibid.*, 9; according to Haiman, because these early dates are derived from a roof-beam, they do not indicate the end of the site’s existence.

“single structures.” The farm of Site 218 is the largest of this type. Other installations associated with the farms include threshing floors, wine presses, watch-booths, and walls enclosing terraced wadi sections.²³²

Haiman also identified three types of encampments: (1) stone and sherd scatterings, representing short-term encampments; (2) groups of single structures, which apparently existed for longer periods of time; and (3) groups of single structures that include one or more structures built like farm dwellings (Sites 133, 138). An open mosque was found at one of the sites (357).²³³

Haiman suggested that these farms represent one-period sites, which were occupied for a little over a century, from the late sixth or early seventh century to the mid–eighth century.²³⁴ However, his reference to moldmade, buff (“Mefjer”) ware vessels from some of these farms indicates that there is Abbasid period occupation.²³⁵ In addition, a comparison between this survey map and Haiman’s later survey map of Har Hamran Southeast reveals discrepancies in his identification of Byzantine versus early Islamic sites.²³⁶ Some of the same ceramic types (especially storage jars and cooking vessels with a late sixth to early eighth century range) are identified in the Map of Har Hamran Southwest as Byzantine, and in the later Map of Har Hamran Southeast as early Islamic.²³⁷ Since Haiman identified as early Islamic ceramic types that others describe as Byzantine, his Map of Har Hamran Southeast contains a much higher percentage of early Islamic sites than any other survey map. The identification of these storage jar and cooking vessel types as early Islamic reflects Haiman’s belief that these farms were established during the Umayyad period.²³⁸ However, when the only ceramic types represented are storage jars and cooking vessels with a late sixth to early eighth century range, there is no basis for determining whether a given farm was established before or after the Muslim conquest. The following is a review of the sites from which chronologically diagnostic pottery is illustrated:²³⁹

Site 20 (Nahal Mitnan). This is a structure on a spur. Haiman identified the pottery as Byzantine.²⁴⁰ One of the three illustrated sherds is a Gaza amphora of late-sixth- to seventh-century date.²⁴¹

Site 218 (Wadi el-‘Asli). This is a settlement that covers approximately 5 dunams. Seven units can be distinguished, each including rooms and courtyards. A large structure is located in the center of the settlement, and a wine press is located to the east. Four blocked cisterns lie nearby, and an oval watch-booth sits on a low hill to the east. The wadi to the north of the settlement is terraced. Haiman identified the pottery as Byzantine.²⁴² The fifteen illustrated sherds include three deep, hemispherical, early Islamic cups or

232. *Ibid.*, 20*–21*.

233. *Ibid.*, 24*.

234. *Ibid.*, 21*–22*.

235. *Ibid.*, 21*; see Avissar, “The Medieval Pottery,” 155–62; Sauer and Magness, “Ceramics of the Islamic Period,” 477–78.

236. See M. Haiman, *Archaeological Survey of Israel—Map of Har Hamran Southeast (199)* (Jerusalem: Israel Antiquities Authority, 1993).

237. Compare, for example, the storage jars in Haiman, *Map of Har Hamran—Southwest*, 50, fig. 2, identified as Byzantine, with those in Haiman, *Map of Har Hamran Southeast*, 34, fig. 44: 1–3, identified as early Islamic.

238. See discussion below; also see Haiman, *Map of Har Hamran Southeast*, 16*: “The farmsteads and accompanying agricultural installations . . . were presumably established under Umayyad rule. . . .” Similar discrepancies are evident in his latest map; M. Haiman, *Archaeological Survey of Israel: Map of Har Ramon (203)* (Jerusalem: Israel Antiquities Authority, 1999); see the discussion of this map below.

239. In other words, this discussion does not include sites from which only less diagnostic types such as storage jars and cooking wares are published. For Site 17, the excavated farm at Nahal Mitnan, see the discussion above.

240. Haiman, *Map of Har Hamran—Southwest*, 41*.

241. *Ibid.*, 54, fig. 1:3; see Majcherek, “Gazan Amphorae,” Form 4.

242. Haiman, *Map of Har Hamran—Southwest*, 87*.

bowls.²⁴³ Though the cooking pots and storage jar suggest that the settlement could have been established during the sixth century, the cups indicate that occupation continued into the eighth to ninth centuries.²⁴⁴

Site 281 (Nahal Horsha). This site consists of structures and pens near a terraced wadi. Haiman identified the pottery as Byzantine and early Islamic.²⁴⁵ None of the four illustrated sherds is chronologically diagnostic, except for the bowl, which may represent a type of mid–sixth to seventh-century date.²⁴⁶

Site 326 (Wadi Umm Hashim). This is a structure with round rooms and courtyards, and two more round structures to the east. Haiman identified the pottery as Early Bronze II and Byzantine.²⁴⁷ The three illustrated sherds identified as Byzantine include what appears to be a bowl of mid–sixth to seventh-century date²⁴⁸ and a Late Roman Red Ware bowl dating mainly from the second half of the fifth to first half of the sixth centuries.²⁴⁹

Site 331 (Nahal Kadesh Barnea). This site consists of three structures, whose walls are interbuilt with a wall enclosing a section of the terraced wadi. Haiman identified the pottery as Byzantine.²⁵⁰ Two of the five illustrated sherds are deep, hemispherical cups or bowls of the eighth to ninth centuries.²⁵¹ The other illustrated pottery, though not as chronologically diagnostic, is consistent with an early Islamic date.

Site 345 (Wadi Umm Hashim). This site consists of two structures adjacent to a wadi, with an animal pen of a later period. The walls of the structures are interbuilt with a wall enclosing sections of two terraced wadis. Haiman identified the pottery as Byzantine.²⁵² The only chronologically diagnostic sherd of the five illustrated pieces is a deep, hemispherical bowl of eighth- to ninth-century date.²⁵³

Site 357 (Nahal Kadesh Barnea). This is a settlement on a plateau with structures, most of which consist of one round or square room. There are also round animal pens. The settlement contains an open, horseshoe-shaped mosque with a round mihrab in the middle of the south wall. Its walls are constructed of large, upright-standing rough-hewn stones. Approximately fifteen cairns are scattered amid the structures. None of the pottery that Haiman identified as Byzantine and early Islamic is illustrated.²⁵⁴

Map of Har Hamran—Southeast (199)

This is the central map in a west–east series of three survey maps (198–200) published by Haiman,²⁵⁵ while a fourth one (203) is located immediately to the south of Map 199. This map covers the eastern section of Ramat Barnea (500–600 m above sea level) and two mountain ranges—Har ‘Aqrav in the east and Har ‘Ayarim in the southwest (750–900 m above sea level). A number of wadis traverse the area.²⁵⁶ This region contains the same types of farms, agricultural installations, and temporary settlements or encamp-

243. *Ibid.*, 150, fig. 4:1–3; see Magness, *JCC*, 196, FBW Bowls Form 1E, dated 8c–9c.

244. For a similar settlement with a watch booth and wine press, but without chronologically diagnostic pottery, see Site 253 (Haiman, *Map of Har Hamran—Southwest*, 96*; 169–70).

245. *Ibid.*, 102*.

246. *Ibid.*, 181, fig. 1:1; see Magness, *JCC*, 195, FBW Bowls Form 1B.

247. Haiman, *Map of Har Hamran—Southwest*, 113*.

248. *Ibid.*, 203, fig. 2:3; see Magness, *JCC*, 195, FBW Bowls Form 1B.

249. Haiman, *Map of Har Hamran—Southwest*, 203, fig. 2:4; see Hayes, *LRP*, 329–38, Late Roman “C” (Phoenician Red Slip) Ware Form 3.

250. Haiman, *Map of Har Hamran—Southwest*, 115*.

251. *Ibid.*, 205, fig. 3:1–2; see Magness, *JCC*, 196, FBW Bowls Form 1E.

252. *Ibid.*, 118*.

253. *Ibid.*, 214, fig. 1:1; see Magness, *JCC*, 196, FBW Bowls Form 1E.

254. Haiman, *Map of Har Hamran—Southwest*, 121*; 218–20; also see Avni, “Early Mosques in the Negev Highlands,” 89–90, who refers to this site as Ramat Barnea.

255. Haiman, *Map of Har Hamran Southeast*.

256. *Ibid.*, 9*, 11*.

ments as the Map of Har Hamran Southwest. As noted above, Haiman identified some of the same ceramic types (especially storage jars and cooking pots with a late-sixth- to early-eighth-century range) as Byzantine in his (earlier) Map of Har Hamran Southwest, and as early Islamic in his (later) Map of Har Hamran Southeast. At Sites 44 and 278, for example, a farm and a settlement, respectively identified by Haiman as early Islamic, the illustrated pottery consists entirely of storage jars and cooking vessels that could either antedate or postdate the Muslim conquest.²⁵⁷ Furthermore, Haiman identified the encampments in the Map of Har Hamran Southeast as Byzantine, although they yielded the same types of late-sixth to early-eighth-century cooking pots and storage jars as the farms and settlements.²⁵⁸ This reflects his belief that “there appears to have been no permanent settlement in the upper Negev highlands in the Byzantine period. Most of the temporary settlements and encampments recorded within the area of Map 199 seem to reflect Byzantine-period activity; the farmsteads and a small number of the transient settlements date to the Early Arab period.”²⁵⁹ Since only cooking vessels and storage jars were recovered at many of these sites, the pottery does not provide a basis for determining whether they antedate or postdate the Muslim conquest. In addition, some of the permanent settlements identified as early Islamic by Haiman yielded Byzantine (sixth- to seventh-century) ceramic types.²⁶⁰ The following is a review of sites from which chronologically diagnostic pottery is published:

Site 74 (Nahal Sirpad). This is a structure consisting of a rectangular unit (tower?) with pens adjoining each of the walls. Haiman identified the pottery as Iron Age II and Byzantine.²⁶¹ The four illustrated sherds identified as Byzantine include a Gaza amphora of late-sixth to seventh-century date.²⁶²

Site 132 (Nahal Sirpad). This is a settlement with a field of stone mounds (Tuleilat el-ʿAnab) on a slope, covering an area of 150 × 200 m. Sections of the neighboring wadis are terraced and fenced. Haiman identified the pottery as early Islamic.²⁶³ The eight illustrated sherds, however, include two cups or bowls that appear to date from the mid-sixth to seventh centuries.²⁶⁴

Site 330 (Nahal ʿAgrav). This site contains five rectangular structures and a pen spread over 100 m. The terraced wadi bank is enclosed by a stone fence. Haiman identified the pottery as early Islamic.²⁶⁵ The

257. *Ibid.*, 34*, 34, fig. 44; 61*, 92, fig. 278.1. Also see the discussion of sites with chronologically diagnostic pottery below.

258. *Ibid.*, 16*; see, for example, Sites 175 and 333.

259. *Ibid.*, 16*. Avni, *Nomads, Farmers, and Town-Dwellers*, 76, has similarly concluded that “There is tenuous archaeological data indicating that the encampments predated the built-up sites. A similar pattern has emerged from surveys conducted in the central and western Negev Highlands. Many of the nomadic sites found here have been attributed to the Byzantine period.”

260. See Sites 132 and 333 below. My identifications of the ceramic types may be incorrect, since they are based solely on line drawings with no descriptions of the ware. Even if I am correct that some of the types represented at these farms and settlements are Byzantine, since many (such as the FBW Bowls Forms 1A and 1B, and the latest variant of Gaza amphoras) have a mid-6c to 7c range, these settlements could have been established after the Muslim conquest. The chronological range of these types (like that of the storage jars and cooking vessels), means that they do not provide a basis for determining whether a site was established before or after the Muslim conquest. Nevertheless, I have the impression that clearly Byzantine ceramic types (such as the FBW Bowls Forms 1A and 1B, and the Gaza amphoras) are not associated with sites established after the Muslim conquest (as opposed to the less chronologically diagnostic storage jars and cooking pots, which continue into the 8c). The best indicators of early Islamic presence are types that do not antedate the 8c, such as deep, hemispherical cups and bowls (FBW Bowls Forms 1D and 1E).

261. Haiman, *Map of Har Hamran Southeast*, 38*.

262. *Ibid.*, 40, fig. 74.3:5; see Majcherek, “Gazan Amphorae,” Form 4.

263. Haiman, *Map of Har Hamran Southeast*, 44*.

264. *Ibid.*, 51, fig. 132.3:1–2; see Magness, *JCC*, 194–95, FBW Bowls Forms 1A–1B.

265. Haiman, *Map of Har Hamran Southeast*, 67*.

11 illustrated sherds include tiny rim fragments of three bowls that may date to the eighth to ninth centuries.²⁶⁶

Site 333 (Nahal 'Aqrav). This is a settlement containing about ten structures along 200 m. Haiman identified the pottery as early Islamic.²⁶⁷ One of the four illustrated sherds is a cup or bowl that appears to be of mid-sixth to seventh-century date.²⁶⁸

Map of Mizpeh Ramon—Southwest (200)

This is the easternmost in the series of survey maps published by Haiman.²⁶⁹ It is dominated by the Har Arikha and Har Hemet ranges (ca. 900 m above sea level). Another mountain range, that of Har Zin (ca. 750 m above sea level), lies southeast of Nahal Zin and the western section of Mishor ha-Ruhot. The southeastern margins of the map area include part of the northern rim of the Ramon Crater.²⁷⁰ Because pottery does not lend itself to clear distinctions between the Byzantine and early Islamic periods, the dating of sites from these periods is methodologically difficult. As in his other survey maps, Haiman argues that farmsteads were established during the early Islamic period, and were abandoned around the mid-eighth century.²⁷¹ Unfortunately, the only illustrated pottery from any of the sites identified as Byzantine to early Islamic on this map is not chronologically diagnostic.²⁷²

Map of Har Ramon (203)

This is the fourth and most recent survey map published by Haiman.²⁷³ It is located directly to the south of his Map 199, and to the west of Rosen's Map 204. Most of the area of Map 203 lies at the southern end of the central Negev highlands, with an average altitude of 900 m above sea level. The southeast corner of the map extends into the western part of the Ramon Crater (see Map 204 below). The riverbeds of Nahal Nizzana, Nahal 'Aqrav, and Nahal Elot flow from northwest to southeast through the area, into the Ramon Crater.²⁷⁴

Haiman identified a total of 66 Byzantine and early Islamic sites in the area of Map 203. These include 15 pastoral-nomadic ("transient") sites, which he believes were probably established during the Byzantine period (fifth to seventh centuries). On the other hand, Haiman dated all 16 farmsteads he documented, together with the associated dams and agricultural fields, to the early Islamic period (seventh to ninth centuries).²⁷⁵ This reflects Haiman's belief, as noted in his other survey maps, that the farmsteads of the central Negev highlands were established under Umayyad rule. Because Haiman defines as "early Islamic"

266. *Ibid.*, 108, fig. 330:1–3; see Magness, *JCC*, 196, FBW Bowls Form 1E. No. 2 looks like it might represent a local imitation of this type. It is impossible positively to identify these tiny fragments without visual inspection.

267. Haiman, *Map of Har Hamran Southeast*, 68*.

268. *Ibid.*, 108, fig. 333:1; see Magness, *JCC*, 194–95, FBW Bowls Forms 1A–1B. A definite identification is impossible without a description of the ware.

269. M. Haiman, *Archaeological Survey of Israel: Map of Mizpe Ramon Southwest (200)* (Jerusalem: Israel Antiquities Authority, 1991).

270. *Ibid.*, 13*.

271. *Ibid.*, 23*–24*.

272. See *ibid.*, Site 260 (a farm); fig. 3:1, identified as the base of a handmade Negbite jar of the early Islamic period. For this ware, see Avni, *Nomads, Farmers, and Town-Dwellers*, 51, and the discussion of Nahal Oded and Har Oded below.

273. See Haiman, *Map of Har Ramon*.

274. *Ibid.*, 7*.

275. *Ibid.*, 11*.

ceramic types that are referred to as “Byzantine” in survey maps published by other archaeologists, Map 203 is unusual in having more early Islamic than Byzantine sites: 27 Byzantine sites versus 39 early Islamic sites.²⁷⁶ The following review of sites from which pottery is published again highlights the problem of assigning these farms to the period before or after the Muslim conquest (see especially Site 79).

Site 1 (Nahal ‘Ayarim). This is a farmstead consisting of four structures on both banks of a tributary of Nahal ‘Ayarim. Three of the structures consist of one square or rectangular room each, and one has a niche in the north wall. The fourth structure is oval. Dams are located in the wadi. Haiman identified the pottery as Early Arab.²⁷⁷ The four illustrated sherds include a deep, hemispherical, early Islamic cup or bowl, and three storage jars.²⁷⁸

Site 13 (Nahal ‘Agrav). This contains the remains of a large structure with adjoining pens. Haiman identified the pottery as Early Arab, including “Early Arab ‘Negbite’ Ware.”²⁷⁹ The five illustrated sherds include a bowl, three jars, and a cooking pot.²⁸⁰ These pieces are not chronologically diagnostic, and Haiman’s assignment of Negbite ware to the early Islamic period is problematic. Negbite ware refers to a group of crude, handmade, and poorly fired vessels characteristic of the Negev highlands. Such coarse, handmade pottery is attested as early as the Early Bronze and Iron Ages in the Negev, though this ceramic tradition continued at least through the Byzantine and early Islamic periods. Since no systematic typology has ever been published, the Negbite vessels found at Byzantine and/or early Islamic sites cannot be closely dated.²⁸¹

Site 62 (Nahal Nizzana). This site consists of the remains of structures. Haiman identified the pottery as Early Arab.²⁸² The six illustrated sherds include three storage jars and a cooking pot, a casserole, and a casserole lid.²⁸³ The most diagnostic piece is the rim and neck of what appears to be a dark-surfaced, white-painted jar or jug.²⁸⁴

276. *Ibid.*, 18*.

277. *Ibid.*, 23*.

278. *Ibid.*, 19; fig. 1; for the cup in fig. 1:1, see Magness, *JCC*, 196, FBW Bowls Form 1E, dated 8c–9c. The storage jar in fig. 1:3 appears to have the swollen neck characteristic of the early Islamic period; see *ibid.*, 230–31, Storage Jars Form 7.

279. Haiman, *Map of Har Ramon*, 24*; he does not state which of the illustrated pieces are of Negbite ware.

280. *Ibid.*, 21, fig. 2:13.

281. I believe that it will be difficult to establish a precise typology and chronology for Byzantine and early Islamic Negbite ware, since it consists mostly of undecorated vessels with simple forms (one exception to this is a Negbite bowl imitating FBW Form 1B; see Avni, *Nomads, Farmers, and Town-Dwellers*, 49, fig. 51:1). For Negbite ware generally, see *ibid.*, 51; also see n. 272 above, where Haiman identifies another fragment of Negbite ware as early Islamic in date; for illustrated examples of Iron Age Negbite ware, see Haiman, *Map of Har Ramon*, 24, fig. 28:8; 28, fig. 48:2–5. It may be that Negbite ware should be associated with nomads or seminomads, as Avni suggests. However, it could have also been produced by more sedentary populations, to supplement higher-quality, wheelmade ceramic products that were difficult and expensive to transport overland to such remote regions.

282. Haiman, *Map of Har Ramon*, 31*.

283. *Ibid.*, 29, fig. 62.

284. Unfortunately, the absence of any fabric description makes this identification tentative. A few fragments of white painted jars and jugs, which are characteristic of northern Palestine and Transjordan, have been found at remote Negev highlands sites; see Haiman, *Map of Har Ramon*, 33, fig. 79:2, discussed below; n. 344 below (from a site in the Map of Makhtesh Ramon) and n. 357 (from Nahal Oded) below. As Whitcomb, “Review of G. Avni,” 101, has noted, such vessels represent imports to this region. At Pella, dark-surfaced, white-painted wares were introduced shortly before the end of the 6c, and were very common in Umayyad assemblages; see A. G. Walmsley, “The Umayyad Pottery and Its Antecedents,” in A. McNicoll, R. H. Smith, and B. Hennessy (eds.), *Pella in Jordan 1: An Interim Report on the Joint University of Sydney and the College of Wooster Excavations at Pella 1979–1981* (Canberra: Australian National Gallery, 1982) 156.

Site 79 (Nahal Qozan). This site consists of the remains of two structures and agricultural installations on the bank of Nahal Qozan. One structure contains two rooms, while the other is square. Two threshing floors and four piles of stones (perhaps Tuleilat el-ʿAnab) are located nearby. A circular watch-booth lies on the slope above, and a stone dam blocks the wadi bed. It is connected to a stone fence and conduits. Haiman identified the pottery as Early Arab.²⁸⁵ The fifteen sherds illustrated from this site are described in the caption as consisting of four cups or bowls, eight storage jars, and three cooking pots.²⁸⁶ However, one of the pieces labeled as a bowl appears to represent a dark-surfaced, white-painted jar or jug.²⁸⁷ The diagnostic early Islamic types consist of two deep, hemispherical cups or bowls²⁸⁸ and a storage jar with swollen neck.²⁸⁹ However, Haiman’s dating of this farmstead only to the early Islamic period is contradicted by the presence of Late Roman “C” Form 3 Ware.²⁹⁰ The presence of this fragment calls into question Haiman’s claim that other farms he surveyed were established after the Muslim conquest. It also highlights the problem of dating these farms on the basis of survey data alone; not only do the vast majority of sherds recovered represent chronologically undiagnostic types (in particular, the cooking pots and bag-shaped storage jars), but the presence or absence of just one diagnostic fragment can change the chronological and historical interpretation. In this case, if the assemblage did not happen to include the single Late Roman “C” sherd, there would be no basis for disputing Haiman’s claim that this farm was established after the Muslim conquest. Instead, this farm appears to have been established no later than the sixth century and was occupied at least into the eighth century. Two conclusions can be drawn from the case of this farm:

(1) The establishment of the Negev highlands farms was a complex process. It is impossible to assign all of the farms in any given area to a single period. Instead, in every area, some of the farms were established during the sixth century, while others were established during the course of the seventh and eighth centuries. The process of abandonment was similarly complex; some of the farms were apparently abandoned during the seventh century, while others were occupied through the eighth and into the ninth centuries. In other words, this pattern is similar to that in the Yattir region, where some of the farms date solely to the sixth to seventh centuries, others date solely to the eighth to ninth centuries, and yet others were occupied for the entire duration of these centuries.

(2) Only excavations, not surveys, can provide a basis for establishing the precise chronology of each farm. This is because there is a good possibility that all of the occupation periods are not represented in the ceramic material recovered in surveys, even when chronologically diagnostic sherds are recovered.

Site 91 (Nahal Nizzana). This site contains nine structures in a valley. Two structures consist of rectangular rooms, while the other seven are circular. Haiman identified the pottery as Early Arab.²⁹¹ Three storage jars and one casserole are illustrated from this site.²⁹² The only chronologically diagnostic piece is an early Islamic storage jar with a swollen neck.²⁹³

Site 124 (Nahal ʿAqrav). This site consists of the remains of a settlement with some twenty structures in two large complexes, on both banks of a branch of Nahal ʿAqrav. One complex, located on a hilltop, contains 15 circular rooms and 5 circular courtyards, with 10 one-room structures nearby. Eight more

285. Haiman, *Map of Har Ramon*, 34*–35*.

286. *Ibid.*, 33, fig. 79.

287. *Ibid.*, 33, fig. 79:2; see n. 284 above.

288. *Ibid.*, 33, fig. 79:1, 3; see Magness, *JCC*, 196, FBW Bowls Form 1E, dated 8c–9c.

289. Haiman, *Map of Har Ramon*, 33, fig. 79:6; see Magness, *JCC*, 230–31, Storage Jars Form 7, dated late 7c to 9c/10c.

290. Haiman, *Map of Har Ramon*, 33, fig. 79:4; see Hayes, *LRP*, 329–38, dated mainly mid–5c to mid–6c.

291. Haiman, *Map of Har Ramon*, 36*.

292. *Ibid.*, 38, fig. 91.4.

293. *Ibid.*, 38, fig. 91.4:3; see Magness, *JCC*, 230–31, Storage Jars Form 7, dated late 7c to 9c/10c.

one-room structures lie on a slope to the south. Haiman identified the pottery as Early Bronze, Middle Bronze I, and Early Arab.²⁹⁴ Only the last two of the nine sherds illustrated from this site are identified as early Islamic.²⁹⁵ Neither of these pieces, which are storage jars, is chronologically diagnostic.²⁹⁶

Site 151 (Nahal Elot). This site consists of two complexes comprising the remains of a settlement near a branch of Nahal Elot. One complex contains two structures with adjoining circular rooms and courtyards, in the southern part of the site. A rectangular structure adjoined by an oval courtyard is located in the northern part of the site. Nearby are the remains of a structure with two circular rooms and a courtyard. Dams are built across the wadi. Haiman identified the pottery as Early Arab.²⁹⁷ The six illustrated sherds consist of two bowls, three storage jars, and a cooking pot, none of which is chronologically diagnostic.²⁹⁸

Site 180 (Nahal Elot). This site contains the remains of two structures near a tributary of Nahal Elot. One consists of two rooms and a courtyard, with an adjoining pen. The other consists of two rectangular rooms linked by a curving wall, and a circular pen adjoined by an oval pen. Dams cross the wadi-beds nearby, and they are linked to stone fences. To the north are three threshing floors. Haiman identified the pottery as Early Arab.²⁹⁹ None of the seven illustrated sherds, which include a bowl, four storage jars, a casserole, and a casserole lid, is diagnostic.³⁰⁰

Site 230 (Nahal Eshharim). This site consists of structures, pens, and agricultural installations spread over an area of 200 meters, near the confluence of the tributaries of Nahal Eshharim. A rectangular, two-room structure with a courtyard lies at the northern end of the site. To its south is a long structure consisting of four rooms in a row, adjoined by a complex of circular rooms and pens, and a square room. To the southwest is another complex including two rectangular structures, adjoined by four pens. To the south is a fenced-in area. Dams cross the eastern tributary, one segment of which is enclosed by a stone fence. Other dams are located nearby, and a threshing floor lies to the south. Haiman identified the pottery as Early Arab.³⁰¹ None of the nine sherds illustrated from this site, which include a bowl, four storage jars, two casseroles, and two cooking pots, is chronologically diagnostic.³⁰²

Map of Makhtesh Ramon (204)

This area, which was surveyed by S. A. Rosen,³⁰³ lies in the southern Negev highlands. It adjoins Map 200 to the north, and Map 203 to the west. It includes the area of the Ramon anticline and the Ramon Crater (Hebrew *makhtesh*). Annual rainfall averages less than 100 mm, although substantial variations occur. The map area can be divided into three subregions: (1) the area to the north of the Ramon Crater; (2) the Ramon Crater; (3) the area to the south of the crater—Har Oded and the western portion of the Nahal Neqarot drainage basin. The Ramon Crater marks the transition from the Central Negev highlands to the southern Negev, and the boundary between the steppe and the true desert. The area to the north of the Ramon Crater is drained by Nahal Nizzana and by the southern tributaries of Nahal Zin. The crater is a

294. Haiman, *Map of Har Ramon*, 40*.

295. *Ibid.*, 46, fig. 124:8–9; the other pieces are Early Bronze.

296. However, the ridges on the outside of the rim of the jar in fig. 124:8 appear to be early Islamic.

297. Haiman, *Map of Har Ramon*, 44*.

298. *Ibid.*, 54, fig. 151.3. The bowl in fig. 151.3:1 might be chronologically diagnostic, but it is not clear whether the hatching in the drawing represents a red slip or paint, or perhaps some sort of glaze.

299. *Ibid.*, 48*.

300. *Ibid.*, 59, fig. 180.4.

301. *Ibid.*, 56*–57*.

302. *Ibid.*, 76; fig. 230:4.

303. S. A. Rosen, *Archaeological Survey of Israel: Map of Makhtesh Ramon (204)* (Jerusalem: Israel Antiquities Authority, 1994).

large, erosional cirque, about 35 km long, 5–7 km wide, and 300–400 m deep, drained by Nahal Ramon and its tributaries.³⁰⁴ The area to its south is relatively flat. No perennial water sources are located within the map area.³⁰⁵ According to Rosen, Roman, Byzantine, and early Islamic remains were found at approximately 120 sites: the Roman period—3 sites, one tentative; the Roman-Byzantine period—24 sites, one tentative; the Byzantine period—95 sites, 6 tentative; and the early Islamic period—19 sites, 5 dated tentatively.³⁰⁶ These include ephemeral camps; caves and rock shelters; threshing floors; pens; camps (four rooms or less); large camps (five rooms or more); farmsteads; agricultural terrace systems; rock-hewn cisterns; and other remains (stone piles, cairns, and installations). Settlement was spread throughout the map area, with the exception of the crater floor, where few sites were recorded. The fact that all of the farmsteads, cisterns, and threshing floors are in the north of the map area, and most of the camps are in its south suggests that the crater was a geographical-climatic border between the fertile lands and the arid desert.³⁰⁷

Rosen's definition of sites as Byzantine or early Islamic is marred by errors and inconsistencies in the identification of the associated ceramic types. In some cases, these types are misidentified,³⁰⁸ while in others, the same types (especially late-sixth to early-eighth-century storage jars and cooking vessels) or undiagnostic fragments are identified as Roman-Byzantine, Byzantine, early Islamic, or Byzantine–early Islamic.³⁰⁹ This can be seen, for example, in the cases of Sites 9 (cooking pots and jug identified as Byzantine–early Islamic),³¹⁰ 23 (storage jar and jug identified as Byzantine),³¹¹ 53 (storage jar and “krater” identified as Byzantine),³¹² 55 (cooking pots identified as Byzantine–early Islamic),³¹³ 66 (jug, handle, and cooking pot identified as Byzantine),³¹⁴ 72 (cooking pot and storage jars identified as Byzantine),³¹⁵ 84 (cooking pots and juglet identified as Byzantine),³¹⁶ 91 (cooking pot identified as Byzantine–early Islamic),³¹⁷ 93 (cooking pot identified as Byzantine),³¹⁸ 123 (jug identified as Roman-Byzantine),³¹⁹ 130 (“krater” identified as early Islamic),³²⁰ 143 (cooking pot identified as Byzantine),³²¹ 155 (jug base identified as early Islamic),³²² 162 (jug and cooking pot identified as Roman-Byzantine),³²³ 165 (“krater”

304. *Ibid.*, 9*.

305. *Ibid.*, 10*.

306. *Ibid.*, 19*–20*. Despite noting that it is difficult to date the pottery with precision, Rosen assigns the sites to specific periods.

307. *Ibid.*, 20*.

308. *Ibid.*, Site 116, 47*, is identified as Roman-Byzantine, but neither of the two illustrated sherds (fig. 116 on p. 71) looks Byzantine; also see the discussion of sites below.

309. For example, compare the cooking pots from Site 55 (*ibid.*, 50, fig. 55), identified as Byzantine–early Islamic, with similar cooking pots from Site 206 (*ibid.*, 97, fig. 206.3), identified as Roman-Byzantine; and from Site 215 (*ibid.*, 99, fig. 215.2), identified as Byzantine–early Islamic.

310. *Ibid.*, 35, fig. 9.2.

311. *Ibid.*, 38, fig. 23.

312. *Ibid.*, 49, fig. 53.3.

313. *Ibid.*, 50, fig. 55.

314. *Ibid.*, 55, fig. 66.3.

315. *Ibid.*, 58, fig. 72.2. The site is identified as Byzantine–early Islamic, but the pottery is labeled Byzantine. The storage jar (fig. 72.2:3) is misidentified in the caption as a juglet, while fig. 72.2:2 appears to be another storage jar, not a cooking pot, as labeled.

316. *Ibid.*, 60, fig. 84.

317. *Ibid.*, 63, fig. 91.

318. *Ibid.*, 64, fig. 93.3.

319. *Ibid.*, 74, fig. 123.3:2.

320. *Ibid.*, 130:7.

321. *Ibid.*, 80, fig. 143.2:2.

322. *Ibid.*, 83, fig. 155.1; the site is identified as Byzantine–early Islamic.

323. *Ibid.*, 86, fig. 162.

identified as Roman-Byzantine),³²⁴ 173 (cooking pot, “krater,” and jar handle identified as Roman-Byzantine),³²⁵ 174 (cooking pot identified as Byzantine),³²⁶ 206 (cooking pots identified as Roman-Byzantine),³²⁷ 215 (cooking pots identified as Byzantine–early Islamic),³²⁸ 224 (cooking pots identified as Byzantine),³²⁹ and 244 (casserole and jugs identified as Byzantine–early Islamic).³³⁰ The accurate dating of these sites is further hampered by the fact that to the south of the Ramon Crater much of the pottery, including the cooking pots and storage jars, consists of unfamiliar, presumably local types. More excavations and the creation of a typology and chronology for the local pottery are necessary before these sites can be dated and used as the basis for more general historical reconstructions.³³¹ Finally, Rosen’s use of the term “Early Arab” to refer to the seventh to eighth centuries is inconsistent with the ceramic evidence, since diagnostic Byzantine types continued through the seventh century, and early Islamic types did not appear until the late seventh to early eighth century.³³²

Sites with Illustrated, Chronologically Diagnostic Pottery

Site 3 (Nahal Nizzana). This is a five-room structure and adjacent courtyard, with two circular structures (threshing floors?), four more circular structures, and a pen and installations nearby. Rosen identified the pottery as Byzantine.³³³ The three illustrated sherds include the almost complete profile of an early Islamic cup or bowl.³³⁴ Thus, although it is possible that the site was established in the Byzantine period, the only chronologically diagnostic piece illustrated attests to eighth- to ninth-century occupation.

Site 18 (Nahal Nizzana). This is a circular structure with wall segments and installations—including hearths—nearby. Rosen identified the pottery as Early Bronze Age and Byzantine.³³⁵ One of the two illustrated sherds identified as Byzantine is a Late Roman “C” (Phocean Red Slip) Ware bowl dated mainly to the second half of the fifth and first half of the sixth centuries.³³⁶

Site 40 (Ma‘aleh Ramon). These are three circular or polygonal-shaped structures at the edge of the Ramon Crater. Rosen identified the pottery as Early Bronze Age, Middle Bronze I (?), and Roman-Byzantine.³³⁷ The only relevant illustrated sherd (identified as “Roman-Byzantine”) is a Gaza amphora of late-sixth to seventh-century date.³³⁸

324. *Ibid.*, 86, fig. 165.

325. *Ibid.*, 88, fig. 173.

326. *Ibid.*, 88, fig. 174.

327. *Ibid.*, 97, fig. 206.3.

328. *Ibid.*, 99, fig. 215.2.

329. *Ibid.*, 102, fig. 224.

330. *Ibid.*, 106, fig. 244.2.

331. For example, both Haiman and Avni agree that the seminomadic encampments in the central and southern Negev highlands antedate the establishment of farms in this region (above, n. 259).

332. Rosen, *Map of Makhtesh Ramon*, 20*–21*; see Magness, *JCC*, 27; Whitcomb, “Khirbet al-Mafjar Reconsidered,” 64.

333. Rosen, *Map of Makhtesh Ramon*, 33*.

334. *Ibid.*, 32, fig. 3.3:1; see Magness, *JCC*, 196, FBW Bowls Form 1E.

335. Rosen, *Map of Makhtesh Ramon*, 35*.

336. *Ibid.*, 37, fig. 18.3:3; see Hayes, *LRP*, 329–38, Late Roman “C” (Phocean Red Slip) Ware Form 3. The other piece is a casserole (fig. 18.3:4).

337. Rosen, *Map of Makhtesh Ramon*, 37*.

338. *Ibid.*, 45, fig. 40.2:4; see Majcherek, “Gazan Amphorae,” Form 4. The other three illustrated sherds date to the Early Bronze Age.

Site 67 (Nahal Nizzana). This is a settlement with terraces in the wadi nearby. Rosen identified the pottery as Byzantine.³³⁹ The only chronologically diagnostic piece of the three illustrated sherds is a deep, hemispherical cup of eighth- to ninth-century date.³⁴⁰

Site 120 (Nahal Ramon). This is a settlement consisting of eight circular structures and installations. Rosen identified the pottery as “Byzantine and early Islamic (?)”³⁴¹ The six illustrated sherds include a Gaza amphora of late-sixth to seventh-century date.³⁴²

Site 160 (Nahal Ramon). This is a circular structure with stone piles nearby. Rosen identified the pottery as Early Bronze Age, Nabatean, and Byzantine or early Islamic.³⁴³ The only illustrated piece identified as Byzantine–early Islamic is a body sherd of a ribbed storage jar painted with vertical lines, which has a sixth- to eighth-century range.³⁴⁴

An open-air mosque at Site 190 (Nahal Ramon) indicates early Islamic presence. This site contains a circular structure, approximately 100 m to the west of which is the mosque. The mosque’s walls are 15 m long, with a 1 × 1 m niche, or mihrab, in the south wall. Unfortunately, none of the pottery, described by Rosen as Byzantine, is illustrated.³⁴⁵

Nahal Oded and Har Oded

In 1988, Avni and Rosen conducted salvage excavations at two sites (256, 264) in the southern part of Rosen’s survey map, south of the Ramon Crater. According to Avni, both contain dwellings, graves, and cultic installations of the types most commonly found in the region, and thus provide a representative portrait of seminomadic settlement during the sixth to eighth centuries.³⁴⁶ The following is a brief description of the remains at each site, followed by a discussion of the published pottery and other finds:

Nahal Oded. This site extends over an area of 10 ha on a wadi terrace at the foot of the southern slope of Har Oded. Its main features are: (a) a massive rectangular structure occupying a natural terrace on the western bank of the wadi (Area A); (b) a cluster of eleven circular and elliptical structures on the eastern bank (Area B); (c) five elliptical structures with an elliptical enclosure (animal pen) nearby (Area C), built on a low natural terrace on the western bank, approximately 50 m north of Area A; (d) the remains of five circular and elliptical structures on the wadi bank (Area D), about 100 m north of Area C; (e) the remains of two circular, partially eroded structures on a low natural terrace (Area E), about 50 m southeast of the massive structure in Area A; (f) the remains of an ancient encampment 50–75 m west of the massive structure in Area A; (g) a cemetery containing eleven graves on a high terrace east of the structures in Area

339. Rosen, *Map of Makhtesh Ramon*, 41*.

340. *Ibid.*, 56, fig. 67.2:3; see Magness, *JCC*, 196, FBW Bowls Form 1E. The other two illustrated sherds are cooking pots (fig. 67.2:1–2).

341. Rosen, *Map of Makhtesh Ramon*, 48*.

342. *Ibid.*, 73, fig. 120:2 (mislabelled a “krater” in the caption); see Majcherek, “Gazan Amphorae,” Form 4. The storage jar in fig. 120:1 is mislabelled a “jug.”

343. Rosen, *Map of Makhtesh Ramon*, 53*.

344. *Ibid.*, 85, fig. 160:10. Though in the drawing the painted lines appear to be dark, the presence of ribbing indicates that this is probably a fragment of a northern Palestinian, white-painted, bag-shaped storage jar; see J. Magness, “Late Roman and Byzantine pottery,” 131. A white-painted juglet fragment was recovered in Avni’s excavations at Nahal Oded (Avni, *Nomads, Farmers, and Town-Dwellers*, 49, fig. 51:7). Also see n. 284 above.

345. Rosen, *Map of Makhtesh Ramon*, 57*; this open-air mosque is not among those listed by Avni, “Early Mosques in the Negev Highlands.”

346. Rosen, *Map of Makhtesh Ramon*, 66*–67*; Avni, *Nomads, Farmers, and Town-Dwellers*, 33. In Rosen’s survey map, both sites are called “Nahal Oded.” In the postexcavation publications, Site 256 is referred to as “Nahal Oded,” and Site 264 as “Har Oded.”

B; (h) three stelae on a higher terrace east of the cemetery; (i) an open-air mosque on a prominent hill southwest of the settlement, at a distance of about 300 m from the massive structure in Area A. Excavations were conducted in the rectangular building in Area A, several of the clustered structures in Area B, and a number of graves east of Area B. A probe was made in the mosque.³⁴⁷

Har Oded. This site is located on the bank of a wadi leading down from the southern slope of Har Oded, approximately 2.5 km east of the Nahal Oded settlement. Its three main features are: (a) a settlement containing 16 circular and elliptical structures, 8 of them built in a row along the western bank of the wadi, over an area of 30 × 120 meters, and the rest scattered along the eastern bank; (b) an open mosque on a hill approximately 100 meters southwest of the site; (c) the remains of an encampment about 200 m from the main settlement, on a wadi bank west of the hill where the mosque is situated. Three structures were excavated (Buildings VII, XI, XII).³⁴⁸

Avni dated the occupation of both sites to the sixth to eighth centuries. He suggested that the clusters of buildings at Nahal Oded (and perhaps the extended row of dwellings at Har Oded) represent different occupation episodes, comparable to the periodic shifting of modern Bedouin encampments.³⁴⁹

The Pottery from Nahal Oded and Har Oded

Although some of the pottery published by Avni originates in the excavations at Nahal and Har Oded, most of it comes from the surface survey of the sites. Avni published the pottery from both sites together due to the homogeneous nature of the ceramic assemblage and the scarcity of diagnostic forms. In addition, the excavations yielded only a small amount of material. A total of 698 sherds was recovered in the excavations and surveys at both sites (about 65% of which comes from Nahal Oded). Most are cooking pots, followed by storage jars, jugs and juglets, and bowls. No lamps or lamp fragments were found at the Oded sites, or at any of the other Byzantine and early Islamic sites surveyed in the southern Negev highlands (that is, to the south of the Ramon Crater).³⁵⁰

The only example of a Late Roman Red Ware import from either site is a surface find of Egyptian Red Slip "A" Ware from Area B at Nahal Oded. Unfortunately, it is a base fragment, though Avni correctly noted that it should be dated from the late sixth to late seventh century.³⁵¹ Another surface find from Nahal Oded is a Fine Byzantine Ware bowl dated from the mid-sixth to late seventh century.³⁵² The other pieces from Nahal Oded are less diagnostic, and apparently represent local types. All except one are surface finds from Area B.³⁵³

Avni also illustrates pottery from the excavations in Building 25 (in Area B) at Nahal Oded.³⁵⁴ This well-constructed, roughly elliptical structure showed stratigraphic evidence for three phases of occupation: (1) traces of a dump or deposit antedating the structure were found in the poorly preserved northeast area,

347. Avni, *Nomads, Farmers, and Town-Dwellers*, 33–36.

348. *Ibid.*, 41–42.

349. *Ibid.*, 45.

350. *Ibid.*, 45–47.

351. *Ibid.*, 47; fig. 50:2. Also see Hayes, *LRP*, 397, "the pieces [of this ware] from these regions are predominantly late (mainly seventh century)."

352. Avni, *Nomads, Farmers, and Town-Dwellers*, 48, fig. 50:1; see Magness, *JCC*, 195, FBW Bowls Form 1B; the "black core" suggests that it is not a Jerusalem product.

353. Avni, *Nomads, Farmers, and Town Dwellers*, 48, fig. 50:3–10. The "well-levigated" red fabric and profile of the bowl in fig. 50:3 suggest that it might be a local imitation of Late Roman Red Ware. There are two other local bowls (fig. 50:4–5), a "cooking basin" (fig. 50:7), cooking pot (fig. 50:8), storage jar (fig. 50:9), and the base of a handmade, Negbite ware jar (fig. 50:10).

354. *Ibid.*, 49, fig. 51.

where mounds of ash and organic matter extended beneath the walls; (2) the main occupation phase; (3) a later phase, indicated by a slightly raised installation adjoining a partition in the center. The thick accumulation of ash and organic material beneath and inside the building suggests that its occupation was prolonged.³⁵⁵ Unfortunately, the eight sherds published from this building are illustrated together, with no indication of their provenience relative to the three stratigraphic phases. The most chronologically diagnostic piece is a handmade bowl that is an apparent imitation of Fine Byzantine Ware Bowls Form 1B, dated to the mid-sixth to late-seventh century.³⁵⁶ There is also the fragment of a juglet made of brown-black ware with white-painted lines of late-sixth to eighth-century date.³⁵⁷ The other pieces are less diagnostic, and appear to represent local types.³⁵⁸ The eleven sherds illustrated from the surface survey at Har Oded are also not chronologically diagnostic.³⁵⁹

The ceramic evidence reviewed here does not support Avni's assertion that "the campsites at both Nahal and Har Oded yielded some sherds of storage jars and jugs for which an earlier date within the Byzantine period can be tentatively suggested. This may be taken to indicate that the campsites antedate the architectural remains, though the evidence is not conclusive."³⁶⁰ Even the more closely dated storage jar types found at the Negev sites have a late-sixth- to early-eighth-century range, while much of the pottery found at sites south of the Ramon Crater appears to represent local types for which no chronology currently exists.

Other Finds

A single coin from Building 20 in Area B at Nahal Oded is one of only two examples from the early Islamic period found to date in the southern Negev highland settlements.³⁶¹ It is an Umayyad postreform coin of the first half of the eighth century minted in Tiberias.³⁶² It was found in a large patch of ash and organic material to the south of Building 20, which yielded a considerable number of finds including fragments of pottery and glass.³⁶³ Avni's statement that this coin was associated with the site's final phase of occupation³⁶⁴ appears to be contradicted by the description of its stratigraphic context, which is described as follows: "The ring of ash [which contained the coin and other finds] seemed to continue under the reinforced section of the wall, and may be associated with the structure's [Building 20s] original phase of use."³⁶⁵ Avni also refers to evidence that the original wall of this building was reinforced, widened, or raised in several places, indicating that it may have been repaired and reused over time.³⁶⁶ He also men-

355. *Ibid.*, 38.

356. *Ibid.*, 49, fig. 51:1 (note its orange fabric and black core); see Magness, *JCC*, 195.

357. Avni, *Nomads, Farmers, and Town-Dwellers*, 49, fig. 51:7, and n. 344 above. For a close parallel, see Walmsley, "The Umayyad Pottery and Its Antecedents," pl. 144:3, from an assemblage dated to 746/47; also see Avissar, "The Medieval Pottery," 163, Type 15, described as "especially popular during the Umayyad period."

358. Avni, *Nomads, Farmers, and Town-Dwellers*, 49; there is a bowl of well-levigated yellow fabric (fig. 51:2); a basin of yellow-brown ware (fig. 51:3); "cooking basins" (fig. 51:4–6), and a handmade Negbite ware jar base (fig. 51:8).

359. *Ibid.*, 50, fig. 52; a bowl of well-levigated red fabric (fig. 52:1); a basin of red fabric (fig. 52:2); cooking pots (fig. 52:3–10), and a jug of well-levigated red fabric (fig. 52:11). The cooking pots with splayed rims and large handles form a distinctive group (fig. 52:3–8).

360. *Ibid.*, 47; also see n. 259 above.

361. *Ibid.*, 38–39, 51; for the second coin, from Biq'at Hissun, see below.

362. *Ibid.*, 51.

363. *Ibid.*, 39.

364. *Ibid.*, 55.

365. *Ibid.*, 39.

366. *Ibid.*, 38.

tions a Carbon 14 date of 667–772 obtained from Building 20.³⁶⁷ Though the ceramic, numismatic, and radiocarbon evidence does not contradict the possibility that the settlement at Nahal Oded was established before the Muslim conquest, it suggests that occupation continued well after the mid–eighth century. The mosques at Nahal Oded and Har Oded, which yielded no finds, provide evidence for Muslim presence, presumably by the eighth century. Muslim presence is also suggested by the four graves excavated, out of a group of eleven near Nahal Oded, in which the bodies were laid on their backs in an extended position, with the heads placed on a flat stone slab facing south.³⁶⁸

Map of Har Saggi—Northeast (225)

The area of Har Saggi,³⁶⁹ located in the southwestern Negev highlands, is a transitional area between the semiarid summits of the Negev highlands to the north and the barren Saggi and Paran plains to the south. The region comprises four principal geographical units: (1) the Har Saggi–Har Nes range, a tableland rising 1000 m above sea level; (2) Har Batur, a sharp anticline; (3) Biq'at Hissun, a wide basin extending to the Har Saggi–Har Nes range in the southwest, and to Har Batur in the north. It contains layers of alluvial loess that are well suited for agriculture; (4) the flat Saggi plains, extending from the west to the Har Saggi range, and southward, to the drainage basin of Nahal Paran. The heights of Har Nes and Har Saggi and the area of Biq'at Hissun are semiarid, while the arid region to the south has minimal precipitation and sparse vegetation. Annual rainfall averages between 50 and 100 mm, with sharp fluctuations from year to year and from area to area.³⁷⁰ The only perennial water source in the map area is a small well at the northern foothills of Har Saggi (Site 185). Some 8 km northwest of the map are the perennial springs of 'Ein ha-Me'ara and Bir el-Ma'in, and about 5 km east of the map—Be'er Karkom. Their flow is scant and they dry up in drought years.³⁷¹

Avni recorded 95 Byzantine–early Islamic sites in the map area. The settlements and the structures they contain are spread out over extensive areas. On the basis of size, Avni distinguished four types of sites: (1) five large sites of 15 to 40 circular and oval structures, interspersed with stone circles, installations, and agricultural plots enclosed by stone fences. Large sheepfolds were recorded in or near the settlements; (2) settlements including five to fifteen structures, established in low-lying areas and along wadi banks, either scattered or arranged in a row; (3) small settlements of one to three structures, or merely a pen; (4) encampments with no structures, consisting of concentrations of sherds, wall segments, stone lines, and installations. The settlements' location and their proximity to extensive agricultural areas reveal that grain harvest was a major means of subsistence in the region, although the pens that accompany most of the settlements prove that sheep-raising supplemented their livelihood as well.³⁷²

In 1985, G. Avni conducted salvage excavations at Site 54 (Biq'at Hissun), which lies within the area of his survey map.³⁷³ The settlement contained three square, single-room structures, one of which had an

367. *Ibid.*, 55; perhaps the carbon-dated material, whose origin is not described, came from the round hearth near the northern wall of this building (see p. 39).

368. *Ibid.*, 39–40, 43–44.

369. G. Avni, *Archaeological Survey of Israel: Map of Har Saggi Northeast (225)* (Jerusalem: Israel Antiquities Authority, 1992).

370. *Ibid.*, 11*.

371. *Ibid.*, 12*.

372. *Ibid.*, 19*. Though Avni suggests that these features (as well as grinding stones found at the settlements) are indicative of a seminomadic population whose principal means of subsistence was from grain cultivation and sheep-raising, they are just as characteristic of sedentary, agriculturalist populations.

373. *Ibid.*, 40*; *idem*, "Biq'at Hissun," *Excavations and Surveys in Israel* 7–8 (1988–89) 33.

adjacent courtyard. Extensive agricultural plots dammed by terrace walls are located in the nearby wadi beds. A threshing floor surrounded by walls built of upright fieldstones was uncovered on a spur to the north of the settlement. None of the nine sherds illustrated from the site, which include a bowl, cooking pots and a lid, jugs, and a storage jar, is chronologically diagnostic.³⁷⁴ All appear to represent the local, unfamiliar types characteristic of this remote region. However, the fragment of a glazed bowl recovered in the excavations indicates ninth-century occupation.³⁷⁵ A circular hearth inside the building with the adjacent courtyard yielded an early Islamic coin.³⁷⁶ Finally, an Arabic inscription was incised on a stone set into one of the terrace fences.³⁷⁷ Although the unfamiliar ceramic types could have a range beginning in the sixth century, the fact that the only chronologically diagnostic finds date to the eighth to ninth centuries suggests that this settlement is mainly or exclusively early Islamic.

Virtually none of the pottery illustrated by Avni from the sites he surveyed in the Har Saggi map is chronologically diagnostic, and most of the types are unfamiliar.³⁷⁸ Though Avni consistently identified this pottery as Byzantine–early Islamic, the almost complete lack of excavated sites in this region means that it is impossible to date these types. The following is a review of the remaining sites with published, chronologically diagnostic pottery.

Other Sites with Illustrated, Chronologically Diagnostic Pottery

Site 21 (Biq'at Hissun). This is a settlement with twelve structures and pens. A row of five upright stones (*maṣṣeboth*) facing southeast is located to the south. Avni identified the pottery as Byzantine–early Islamic.³⁷⁹ One of the three illustrated sherds is a deep, hemispherical cup or bowl, which could date to the mid–sixth to seventh centuries, or to the eighth to ninth centuries.³⁸⁰

Site 34 (Nahal Beroqa). This is a settlement with fourteen circular and oval structures, a pen, and a cistern. Avni identified the pottery as Early Bronze Age (a few sherds) and Byzantine–early Islamic.³⁸¹

374. Avni, *Map of Har Saggi*, 51; unfortunately, these are line drawings with no accompanying descriptions of the ware. Idem, “Biq'at Hissun,” identified this pottery as late Byzantine and early Islamic.

375. Avni, “Biq'at Hissun;” idem, *Nomads, Farmers, and Town-Dwellers*, 57. Idem, “Early Mosques in the Negev Highlands,” 93, refers to “some sherds of ninth century glazed pottery” from Biq'at Hissun. For the appearance of Islamic glazed wares in Palestine in the 9c, see Magness, “The Dating of the Black Ceramic Bowl,” 205 n. 3; Sauer and Magness, “Ceramics of the Islamic Period,” 478; Magness, “The Chronology of Capernaum.”

376. Avni, “Biq'at Hissun;” idem, *Nomads, Farmers, and Town-Dwellers*, 55, seems to indicate that it is an Umayyad, postreform coin.

377. Avni, *Map of Har Saggi*, 40*.

378. See *ibid.*, Site 17 (bowls); Site 49 (cooking pots, casseroles, storage jars, jug); Site 77 (basin, storage jar); Site 87 (cooking pots and lid); Site 91 (storage jar); Site 92 (bowl, cooking pots); Site 104 (cooking pot); Site 122 (cooking pot); Site 143 (bowl, casserole; illustrated in Avni, *Nomads, Farmers, and Town-Dwellers*, fig. 53:4, 9); Site 149 (cooking pot); Site 153 (cooking pots); Site 160 (bowl, handmade Negbite jar; illustrated in Avni, *Nomads, Farmers, and Town-Dwellers*, fig. 53:5, 14); Site 169 (cooking pot); Site 172 (bowl); Site 184 (punctured body sherd); Site 200 (cooking pot, juglet, storage jar [the captions to nos. 1 and 3 are apparently reversed]); Site 202 (cooking pot); Site 240 (jar, jug); Site 248 (cooking pots).

379. Avni, *Map of Har Saggi*, 33*.

380. This pottery is illustrated in Avni, *Nomads, Farmers, and Town-Dwellers*, 52, fig. 53:1, 3, 10. The form of the bowl matches Magness, *JCC*, 196, FBW Bowls Form 1E, but its well-levigated, pink-orange fabric is characteristic of the earlier FBW Bowls Forms 1A and 1B. Without visual inspection, it is impossible to determine which variant this bowl represents, or whether it is indeed a local imitation of FBW bowls. The ring base of the bowl in Avni, *Nomads, Farmers, and Town-Dwellers*, fig. 53:3 is apparently made of the same ware.

381. Avni, *Map of Har Saggi*, 35*–36*.

One of the two illustrated sherds is a small bowl of pink fabric that appears to date to the mid-sixth to seventh centuries.³⁸²

Site 164 (Wadi Guraiya). This is a settlement with eight circular and oval structures, and agricultural terraces and a cistern nearby. Avni identified the pottery as Byzantine–early Islamic.³⁸³ Two of the six illustrated sherds are storage jars with the swollen necks characteristic of the late seventh to ninth or tenth centuries.³⁸⁴

Site 282 (Nahal Saggi). This site contains four rectangular and oval structures in a row. There is a stone pile in the center of the site, and three rectangular structures to the east. Avni identified the pottery as Byzantine–early Islamic.³⁸⁵ The only sherd illustrated is a storage jar with swollen neck of late seventh to ninth- or tenth-century date.³⁸⁶

The Northern ‘Arabah: Nahal Shahaq

In 1982, a salvage excavation was conducted by Y. Yisrael and D. Nahlieli at an early Islamic settlement at Nahal Shahaq.³⁸⁷ This single-period site lies in the plains of the northern ‘Arabah, about 3 km north of the springs at ‘Ein Hazeva. The settlement, which covers almost five dunams, consists of ten rectangular structures of varying size and plan. Buildings 1–3, which were partially excavated, were built of mudbrick on stone foundations. Traces of plaster and lime found in Building 1 suggest that the structures were plastered and whitewashed, and reed imprints in hardened mud in the debris of Building 3 indicate wood-and-reed roofing. The largest building, 3, is located in the center of the village and has a row of side-by-side rooms. The buildings yielded few finds, but a dump near Building 3 (L25) contained pottery, lead ornaments, metal artifacts, stone vessels, a wooden box, coins, bone tools, remains of textiles, mats, ropes, and leather objects, botanical remains, and locks of lice-infested human hair. There was also a lead bulla bearing the impression of an official seal, “by Yazid.” On the basis of these finds the excavators concluded that the Nahal Shahaq site was inhabited during the Umayyad and early Abbasid periods (seventh to ninth centuries). The presence of peach pits, date stones, and grain suggests that the inhabitants cultivated the arable areas near ‘Ein Hazeva. The rarity of small finds in the excavated areas and the absence of signs of burning point to the abandonment instead of the violent destruction of the site.³⁸⁸

The 17 pieces of pottery illustrated from the excavations were correctly dated by the excavators to the Umayyad and early Abbasid periods. They include bowls and basins of early Abbasid Mahesh ware,³⁸⁹ an almost intact wheelmade (“Persian”) oil lamp of sixth- to seventh-century date,³⁹⁰ and a fragment of an early channel-nozzle oil lamp of seventh- to early-eighth-century date.³⁹¹ There is also an example of a

382. The pottery is illustrated in Avni, *Nomads, Farmers, and Town-Dwellers*, 52, fig. 53:2, 8. For the bowl (fig. 53:2), see Magness, *JCC*, 195, FBW Bowls Form 1B (perhaps a local imitation?).

383. Avni, *Map of Har Saggi*, 63*.

384. *Ibid.*, 91, nos. 5–6 (no. 6 is unusually large); see Magness, *JCC*, 230–31, Storage Jars Form 7.

385. Avni, *Map of Har Saggi*, 131 (not mentioned in the English text on p. 86*).

386. *Ibid.*; see Magness, *JCC*, 230–31, Storage Jars Form 7.

387. Israel et al., “The Nahal Shahaq Site,” 1*–14*. For other early Islamic sites in the southern Negev and ‘Arabah, see Avner and Magness, “Early Islamic Settlement in the Southern Negev.”

388. Israel et al., “The Nahal Shahaq Site,” 4*; 113.

389. *Ibid.*, 7*, fig. 6:1–2; compare these with Whitcomb, “Mahesh Ware,” figs. 3:a–j; 4:c, m, o.

390. Israel et al., “The Nahal Shahaq Site,” 7*, fig. 6:17; see Magness, *JCC*, 129; for the possibility that this type continued into the 8c, see n. 54 above.

391. Israel et al., “The Nahal Shahaq Site,” 7*, fig. 6:18; see Magness, *JCC*, 256, Oil Lamps Form 4B.

steatite bowl.³⁹² An almost intact, elongated, handleless jar with rounded base may have been used in a water wheel.³⁹³

The 16 coins found in the excavations, most of which come from the dump by Building 3 (L25), range in date from the Hellenistic to early Islamic periods.³⁹⁴ One coin is Hellenistic, one is Hadrianic, 7 date to the fourth century C.E., one is of Heraclius (610–41), and one is an imitation(?) coin of Constans II (641–668). The 5 remaining coins are Umayyad (only one of which is dated, 734/735).³⁹⁵ Two lead bullae stamped in Arabic, only one of which was legible, were also found in the dump (L25). The name Yazid, which appears on the legible bulla, could be identified with either one of two Umayyad governors of Egypt (who ruled from 734 to 745, and from 745 to 749), or with an early Abbasid governor of that name (762–69). The formula on the lead seals resembles those found on glass weights of this period.³⁹⁶

392. Israel et al., “The Nahal Shahaq Site,” 9*, fig. 7:25; this example differs from the usual eighth- to ninth-century steatite and black ceramic bowls in having thick walls and a rounded base; see Magness, “The Dating of the Black Ceramic Bowl.”

393. Israel et al., “The Nahal Shahaq Site,” 7*, fig. 6:14. For a water wheel jar (*nuria* or *saqiyya* pot) with a slightly different profile from a 9c to early 10c context in a village near Jerusalem, see J. C. Finkelstein, “The Islamic Pottery from Khirbet Abu Suwwana,” 31*, 27*, fig. 6:11.

394. For the coins and bullae, see A. Berman, “Coins,” in Israel et al., “The Nahal Shahaq Site,” 11*–13*.

395. The fact that such a large number of the coins recovered at this single period early Islamic site are fourth-century issues suggests that these late Roman bronze issues may have remained in circulation in Palestine even after the Muslim conquest. See my discussion of ‘Ein Boqeq in the chapter on the *limes* in southeastern Judea.

396. Berman, “Coins,” 13*.

CHAPTER 7

The Northwest Negev

This chapter reviews the published evidence from excavations and surveys for Byzantine and early Islamic settlement in the northwest Negev, as far west as Be'er-sheva'. The only survey map published for this region to date (aside from Yattir) is the Map of Urim; the rest of this discussion reviews excavation reports of isolated sites.¹

Map of Urim (125)

The area of the Map of Urim extends over the central portion of the lower Besor region in the northwest Negev.² The largely flat terrain averages 120 m above sea level. Rock formations are composed of Aeolian sediments—sand, loess, and clays. There is rolling terrain only where the eastern fringes of the map touch the upper terraces of Nahal Besor. The average annual rainfall is 250 mm. Nahal Besor (Wadi Shallala), which has the only perennial water sources in this region, winds through the western section of the map. According to Gazit, the Byzantine period marked a peak in sedentarization, with the number of sites on the flats equaling the number of sites along Nahal Besor.³ Located within the map area are extensive ruins of two large Byzantine settlements: H. Be'er Shema' (Site 160) and Kh. el Malta'a (most of which is in the south of the still unpublished Map of Pattish [Map 121]). The other 120 Byzantine sites identified by Gazit include small settlements, farms, aqueducts, cemeteries, installations and kilns, camps, dams, and a church. The southern border of Palaestina Prima passed through the Map of Urim; most of the map area was included within the district of Gerar (Saltus Gerariticus).⁴

Though he acknowledged the difficulties in distinguishing Byzantine from early Islamic pottery, Gazit identified only 19 sites with early Islamic occupation. Since none of these was newly established, Gazit concluded that there was a marked decline in general settlement patterns. The early Islamic sites include an especially large number of camps (Sites 54, 56, 60, 95, 107, 109, 128, 138, 163, 165, 213, 223). According to Gazit, excavations of the church at H. Be'er Shema' revealed that it was deserted in an orderly fashion, probably in the second half of the seventh century. He suggested that this occurred at other settlements

1. This review does not include Ashkelon and kiln sites for the manufacture of Gaza amphoras. See, for example, Y. Yisrael, "Ashkelon," *Excavations and Surveys in Israel* 13 (1995) 100–105; idem, "Survey of Pottery Workshops, Nahal Lakhish–Nahal Besor," *Excavations and Surveys in Israel* 13 (1995) 106–7; Johnson and Stager, "Ashkelon: Wine Emporium of the Holy Land."

2. Gazit, *Map of Urim*.

3. *Ibid.*, 9*.

4. *Ibid.*, 16*–17*.

in the area and that the remains of activity and finds related to this period attest to the pastoral and nomadic character of the population.⁵

As the following discussion illustrates, Gazit appears to have misdated much of the pottery he collected. This calls into question the validity of his conclusion that there was a decline in settlements after the Muslim conquest.⁶

Sites with Illustrated, Chronologically Diagnostic Pottery

Site 57 (Nahal Besor). These are seven structures, a cistern, and pottery concentrations. Large numbers of sherds are scattered throughout site. Gazit identified the pottery as Byzantine.⁷ All three illustrated sherds are Gaza amphoras, apparently of late-sixth- to seventh-century date.⁸

Site 60 (Be'er 'Ali Abu Sa'alik). This is a large campsite (100 dunams), attributed to several periods, that includes concentrations of fieldstones and ashlar cut from limestone, conglomerate, and beachrock; thick ash spots; many fragments of millstones and grinding stones of beachrock and red granite; pieces of stone slabs and architectural elements, including a threshold and part of a column drum; large chunks of flint, pottery, glass fragments, and kiln slags. The site consists mostly of hearths; the architectural elements were apparently removed from nearby Be'er Hamdi es Sani (Site 61), and served as wind-shelters. Gazit identified the pottery as Roman, Byzantine, early Islamic, and Mamluke (majority of finds).⁹ All eight illustrated sherds, identified in the caption as Mamluke, instead appear to be early Islamic.¹⁰ They include early Islamic (ninth- to tenth-century) polychrome splash-glazed bowls,¹¹ and Abbasid period buff ("Mefjer") ware jug handles.¹²

Site 107 (Nahal Besor). This is a campsite attributed to several periods, with light scatters of flint tools and flakes, pottery, grinding stone fragments, fieldstones, and segments of an oven. Gazit identified the pottery as Chalcolithic, Iron Age (?), Byzantine, and early Islamic.¹³ The last five of the six illustrated sherds are identified in the caption as Byzantine. The only one that may be chronologically diagnostic is a storage jar, which appears to have the swollen rim characteristic of the early Islamic period.¹⁴

Site 138 (Shemurat Ha-Besor–Hazerim road). This is a large campsite with pottery scatters and small wadi stones. A similar campsite lies to the northeast. Gazit identified the pottery as Roman, Byzantine, and early Islamic.¹⁵ The first of the four illustrated sherds, labeled "Roman" in the caption, is actually

5. *Ibid.*, 17*–18*. Unfortunately, no pottery is published in the only report that has appeared to date on the excavations of the church; see D. Gazit and Y. Lender, "Horvat Be'er Shema'," *Excavations and Surveys in Israel* 10 (1991) 43–45.

6. Chronologically undiagnostic pottery is illustrated by Gazit, *Map of Urim*, from the following sites: 56 ("chalice" and "stand" identified as early Islamic); 58 (bowls and storage jar); and 217 (basin). The omission of the indication of red slip on most of the Late Roman Red Ware profiles increases the difficulty of identifying these types on the basis of line drawings alone. For example, one of the bowls from Site 58 (*ibid.*, 39, fig. 58:2) might be African Red Slip Ware Form 99, dated ca. 510–620 (see Hayes, *LRP*, 152–55).

7. Gazit, *Map of Urim*, 40*.

8. *Ibid.*, 39, fig. 57.3; see Majcherek, "Gazan Amphorae," Form 4.

9. Gazit, *Map of Urim*, 41*.

10. *Ibid.*, 40, fig. 60.2.

11. *Ibid.*, 40, fig. 60.2:1–5; see Avissar, "The Medieval Pottery," 75–81, Types 2, 3, 6; also see Sauer and Magness, "Ceramics of the Islamic Period," 478.

12. Gazit, *Map of Urim*, 40, fig. 60.7–8; see Avissar, "The Medieval Pottery," 155–63, Types 2–12; Sauer and Magness, "Ceramics of the Islamic Period," 477.

13. Gazit, *Map of Urim*, 50*.

14. *Ibid.*, 53, fig. 107.4; see Magness, *JCC*, 230–31, Storage Jars Form 7, dated late 7c to 9c/10c.

15. Gazit, *Map of Urim*, 55*.

a Late Roman "C" Ware Form 3 bowl, dated mainly to the second half of the fifth and first half of the sixth centuries.¹⁶ The second piece, labeled "Byzantine," is a Gaza amphora, apparently of mid-fifth to seventh-century date.¹⁷ The other two sherds, labeled "Early Arab," include a bowl and a type of basin characteristic of the southern coastal region in the sixth to seventh centuries.¹⁸

Site 163 (no name). This is a large campsite with scatters of wadi-stones, flint flakes, pottery, and fragments of stone vessels. Gazit identified the pottery as Roman, Byzantine, and early Islamic.¹⁹

Five sherds are illustrated, all labeled "Roman."²⁰ These include what appear to be an African Red Slip Ware bowl;²¹ a Late Roman "C" (Phocean Red Slip) Ware bowl of the late sixth to early seventh centuries;²² a type of basin characteristic of the southern coastal region in the sixth to seventh centuries;²³ and a Fine Byzantine Ware cup or bowl dated from the mid-sixth to seventh centuries.²⁴ Thus, all of the chronologically diagnostic pottery illustrated from this site dates to the sixth and seventh centuries.

Site 164 (no name). This is a campsite with scatters of nondiagnostic flint tools and pottery attributed to several periods. Gazit identified the pottery as Roman and Byzantine.²⁵ One of the two illustrated sherds, labeled Byzantine, is a Gaza amphora, apparently of mid-fifth to seventh-century date.²⁶

Site 210 (Urim-Ze'elim junction road). This is a campsite with scatters of pottery and mixed flint tools. Gazit identified the pottery as Roman and Byzantine.²⁷ The two sherds, labeled "Roman or Byzantine," are a Late Roman "C" Ware bowl of the second half of the fifth and first half of the sixth centuries,²⁸ and a Gaza amphora of late-sixth- to seventh-century date.²⁹

Site 221 (Bir Wakili Shuteiwi). This is an extensive farm complex that includes structures, dams, a quarry, wells, agricultural terraces, and scatters of pottery, flint tools, glass fragments, tesserae, kiln slags, fragments of ashlar and marble. Gazit identified the pottery as late Roman and early Byzantine.³⁰ The first of four illustrated sherds, labeled "Roman," appears to be a Late Roman "C" Ware bowl dated from the late fourth century to the third quarter of the fifth century.³¹ The other three pieces, labeled "Byzantine," include a fragment decorated with a row of applied lions (?).³² None of these is recognizably Byzantine.

Site 245 (Nahal Besor). This is a campsite with light scatters of mostly nondiagnostic flint tools and pottery, attributable to several periods. Gazit identified the pottery as Roman and Byzantine (?).³³ One of the two illustrated sherds, both of which are labeled "Roman," is a Gaza amphora of mid-fifth- to seventh-century date.³⁴

16. *Ibid.*, 60, fig. 138:1 (no indication of red slip); see Hayes, *LRP*, 329–38.

17. Gazit, *Map of Urim*, 60, fig. 138:2; see Majcherek, "Gazan Amphorae," Forms 3–4.

18. Gazit, *Map of Urim*, 60, fig. 138:3–4; see Magness, *JCC*, 160.

19. Gazit, *Map of Urim*, 59*.

20. *Ibid.*, 66, fig. 163.

21. *Ibid.*, 66, fig. 163:1; with no indication of red slip, a definite identification is impossible. It may be ARS Form 106, dated ca. 600–660+; see Hayes, *LRP*, 168–71.

22. Gazit, *Map of Urim*, 66, fig. 163:2 (with no indication of red slip); see Hayes, *LRP*, 343–46, LRC Forms 10A–B.

23. Gazit, *Map of Urim*, 66, fig. 163:3; see Magness, *JCC*, 160.

24. Gazit, *Map of Urim*, 66, fig. 163:4; see Magness, *JCC*, 194, FBW Bowls Form 1A.

25. Gazit, *Map of Urim*, 60*.

26. *Ibid.*, 66, fig. 164:1; see Majcherek, "Gazan Amphorae," Forms 3–4.

27. Gazit, *Map of Urim*, 68*.

28. *Ibid.*, 78, fig. 210:1; see Hayes, *LRP*, 329–38, LRC Form 3.

29. Gazit, *Map of Urim*, 78, fig. 210:2; see Majcherek, "Gazan Amphorae," Form 4.

30. Gazit, *Map of Urim*, 71*.

31. *Ibid.*, 82, fig. 221.3:1; see Hayes, *LRP*, 325–27, LRC Form 1.

32. Gazit, *Map of Urim*, 82, fig. 221.3:2–4.

33. *Ibid.*, 75*.

34. *Ibid.*, 88, fig. 245:2; see Majcherek, "Gazan Amphorae," Forms 3–4.

No pottery is illustrated from Site 213 (Gevulot junction), a campsite with scatters of wadi-stones cracked by fire, flint splinters, and pottery. Gazit identified the pottery as Byzantine, early Islamic, and Mamluke. He also reported early Islamic and Mamluke coins.³⁵ One coin, an issue of ‘Abd el-Malek b. Yazid (751–58 C.E.), attests to Abbasid presence.³⁶

Excavated Sites in the Northern Negev

Additional information on Byzantine and early Islamic farms and settlements in the northern Negev is provided by reports on salvage excavations. Most of these are preliminary reports with no illustrated pottery. The following is a review of sites from the area of the northwest Negev to Be’er-sheva’ with reported Byzantine and early Islamic occupation (that is, sites with evidence for continued, post-seventh-century occupation).

The Northwest Negev

Excavations were conducted in 1987 by D. Nahlieli and Y. Yisrael at Horvat Pattish, to the northwest of Be’er-sheva’. Horvat Pattish is identified with the village of Pattish on the Madaba map, located in the district of Gerar. The settlement, which covers an area of about 100 dunams, includes the remains of a large public building, cisterns, and a possible industrial installation. Six occupation strata ranging from the Byzantine to late Fatimid periods were distinguished in the excavated area. The excavators noted that no evidence for a violent destruction was found in the transition from the Byzantine to early Islamic periods.³⁷

In 1992–93 Y. Dagan conducted excavations at Horvat Raqiq, a site located on low loess hills at the intersection of Nahal Pattish and Nahal ‘Ashan, to the northwest of Be’er-sheva’. The excavations revealed the remains of a complex of rooms around a central courtyard, which apparently represent part of a farmstead. The finds, which are dated to the Byzantine and early Islamic periods, included six intact storage jars (two of which bore Greek inscriptions), jugs, pilgrim flasks, cooking pots, and glass vessels.³⁸

Excavations conducted in 1990–91 by I. Gilead, S. A. Rosen, and P. Fabian at Horvat Matar (Bir Abu Matar) revealed Byzantine and early Islamic remains above those of the Chalcolithic period.³⁹ These remains included a monumental building of the Byzantine period, above which was an early Islamic farmhouse. Both buildings underwent two construction phases. The two-storey Byzantine building, which covered an area of over 400 sq. m, was constructed of ashlar masonry covered with red-painted plaster or mosaics. Its floors were paved with plastered flagstones, and three column bases were found. The remains of a larger, earlier building, perhaps a church, were incorporated in this later building. The earlier building was probably erected in the late fifth or early sixth century, while the later building dates to the late sixth and early seventh century. A reused tombstone incorporated into the floor of the later building bears a Greek inscription dated to 537. The Byzantine building was covered by a large, early Islamic farmhouse. Remains of ovens, pottery, stone objects, and bones were found in the rooms. According to the excavators, the farmhouse was built after the Byzantine building went out of use, but not before the end of the seventh

35. Gazit, *Map of Urim*, 69*.

36. *Ibid.*, 79.

37. D. Nahlieli and Y. Yisrael, “Horvat Pattish,” *Excavations and Surveys in Israel* 7–8 (1988–89) 145–46. No pottery is illustrated, though the excavators noted the presence of glazed wares in the four uppermost strata.

38. Y. Dagan, “Horvat Raqiq,” *Excavations and Surveys in Israel* 15 (1996) 103–4. No pottery is illustrated.

39. I. Gilead, S. A. Rosen, and P. Fabian, “Horvat Matar (Bir Abu Matar)—1990/1991,” *Excavations and Surveys in Israel* 12 (1994) 97–99.

century. The pottery associated with its second phase of occupation is described as including “store jars and cooking pots characteristic of the end of the Byzantine and beginning of the Islamic periods,” though “pottery of the Kh. el-Mefjer type was also present.”⁴⁰ The presence of buff (“Mefjer”) ware indicates that occupation at this site continued at least to the second half of the eighth century.⁴¹

Be'er-sheva'

In 1986, Y. Govrin excavated a square structure paved with a mosaic floor in the center of the old Bedouin market in Be'er-sheva'. Four column bases belonged to a courtyard surrounded by porticoes. Govrin suggested that this was the atrium of a mansion that was built at the end of the Byzantine period and continued to be inhabited during the early Islamic period. The mosaic floor was decorated with different geometric designs in each of the porticoes and a hunting scene in the center. The finds included fragments of white marble slabs, bowls, and a moldmade, pear-shaped lamp with a floral design on the front and a rosette within a circle on the base. The last indicates seventh- to early eighth-century occupation.⁴²

An excavation conducted in 1992 by P. Fabian and D. Rabin northeast of the wholesale market in Be'er-sheva', next to the Eilat road, revealed the remains of a structure with rooms around a courtyard. The original period of occupation dated to the Byzantine period, while a second period of occupation dated to the early Islamic period. Two phases could be distinguished in the early Islamic occupation level, dating to the second third of the seventh century to early eighth century, and to the second half of the eighth century, respectively. An early Islamic oven was made of a reused Byzantine storage jar that had a Greek dipinto on the shoulder. There was also a silo containing numerous potsherds and a large ceramic cooking stove.⁴³

In 1991, four sites in the Nahal 'Ashan area of Be'er-sheva' were excavated by O. Katz and H. Bar-Ziv. The remains of farmhouses dating to the Byzantine and early Islamic periods were uncovered in two areas (A and C). Both farmhouses had rooms around a courtyard, and plastered cisterns.⁴⁴

In 1991, O. Katz conducted excavations at a site south of Nahal Beqa' in Be'er-sheva'. A small structure consisting of a room with an entrance passage was found, which apparently belonged to a farmstead.⁴⁵ The nine illustrated sherds include two Late Roman “C” Ware bowls dated to the second half of the fifth and first half of the sixth centuries,⁴⁶ an imported amphora of fifth- to mid-seventh-century date,⁴⁷ and a bowl base identified by Katz as Islamic.⁴⁸

40. *Ibid.*, 98. No pottery is illustrated.

41. See Avissar, “The Medieval Pottery,” 155–63, Types 2–12; Sauer and Magness, “Ceramics of the Islamic Period,” 477.

42. Y. Govrin, “Beersheba,” *Excavations and Surveys in Israel* 7–8 (1988–89) 12 (not illustrated); apparently, this is an early channel-nozzle oil lamp of the 7c to early 8c; see Magness, *JCC*, 255–58, Oil Lamps Form 4A; for examples of rosettes on the bases of lamps of this type, see Rosenthal and Sivan, *Ancient Lamps*, 131, nos. 534–35.

43. P. Fabian and D. Rabin, “Be'er Sheva',” *Excavations and Surveys in Israel* 15 (1996) 105–6. No pottery is illustrated.

44. H. Bar-Ziv and O. Katz, “Be'er Sheva, Nahal 'Ashan,” *Excavations and Surveys in Israel* 13 (1995) 116–17. No pottery is illustrated, but “Late Byzantine and Early Islamic” sherds are described as having come from these buildings and from the plaster of one of the cisterns.

45. O. Katz, “Be'er Sheva, Nahal Beqa' 1,” *Excavations and Surveys in Israel* 12 (1994) 96–97. The presence of ashlar and roof tiles, and the diversity of the ceramic assemblage contradict Katz's suggestion that this structure was a tool shed or watch-booth.

46. *Ibid.*, 97, fig. 113:1–2; see Hayes, *LRP*, 329–38, LRC Form 3.

47. Katz, “Be'er Sheva, Nahal Beqa' 1,” 97, fig. 113:5; see Peacock and Williams, *Amphorae and the Roman Economy*, 185–87, Class 44. The storage jars or amphoras with red dipinti mentioned from some of the other Byzantine-early Islamic sites in Be'er-sheva' discussed here probably represent this type.

In 1990–91, excavations were conducted by N. Negev at a site on a loess plain north of Ben-Gurion University in Be'er-sheva'. Eight buildings of the Byzantine–early Islamic period were uncovered, each of which contained a main room, smaller rooms, a courtyard, cistern, and installations. The buildings had stone columns and stone (sometimes marble) pavements. In some there was evidence of two occupation phases. Negev suggested that the structures of the earlier phase were of a temporary nature and may represent the transition from seminomadism to permanent settlement. Twelve cist graves characteristic of the Byzantine period were uncovered near the buildings. According to Negev, the finds, which date to the early Islamic period, include pottery, stone grinding tools, iron nails, marble fragments, a few coins, broken jewelry, cosmetic instruments, and several lumps of sulphur.⁴⁹ However, the “numerous sherds bearing Greek graffiti” and “complete slipper-shaped lamps” he mentions apparently date to the sixth to seventh centuries.⁵⁰ The cist graves and Greek inscriptions (one of which contains a cross) indicate that the population was Christian. The finds described by Negev suggest that the occupation of this site dates to the sixth to seventh centuries.⁵¹

48. Katz, “Be'er Sheva, Nahal Beqa' 1,” 97, fig. 113:9.

49. N. Negev, “Be'er Sheva, University Campus,” *Excavations and Surveys in Israel* 12 (1994) 95–96.

50. *Ibid.*, 96. The sherds with Greek inscriptions are probably imported amphoras (see above n. 47). The “slipper-shaped” lamps (Hebrew *narot sandal*) probably refer to wheelmade (“Persian”) oil lamps, common in southern Palestine in the 6c–7c centuries (see Magness, *JCC*, 129), though this term is also used to describe candlestick lamps (see Magness, *JCC*, 251–53, Oil Lamps Form 3).

51. For other 6c–7c sites in Be'er-sheva', see Y. Ustinova and P. Nahshoni, “Salvage Excavations in Ramot Nof, Be'er Sheva,” *Atiqot* 25 (1994) 157–77; F. Sontag, “Be'er Sheva': The Courthouse (A),” *Hadashot Arkheologiyot—Excavations and Surveys in Israel* 109 (1999) 89*–90* (the pottery is illustrated with the Hebrew text on pp. 135–36).

CHAPTER 8

The Negev Towns

Nessana

The site of Nessana (Arabic Auja el-Hafir), in the western part of the central Negev, was excavated from 1935 to 1937 under the direction of H. D. Colt of the British School of Archaeology in Jerusalem. Two of the three volumes of the final excavation report are devoted to the more than one thousand papyri discovered at the site.¹ Nothing has yet been published about the excavations that D. Urman of Ben-Gurion University of the Negev has been conducting at the site since 1987.

The Colt expedition focused on the acropolis or citadel, where modern buildings constructed by Ottoman troops before and during World War I had severely damaged the ancient structures. The earliest remains discovered belong to a building that the excavators identified as a Hellenistic (second-century B.C.E.) fort, whose foundations were incorporated into the Byzantine church at the northern end of the summit.² The finds from the site reflect a period of prosperity in the first century B.C.E. and first century C.E., followed by a period of decline that lasted until the fifth century.³ According to Colt, the large fort (85 × 35 m) that occupies most of the acropolis was constructed during the first quarter of the fifth century. It consisted of a large, open enclosure fortified with a wall and towers. The construction of rooms 33–43 on the western side suggests that they are contemporary with the fort, while the eight rooms along the interior of the eastern wall appear to be later additions.⁴ The early fifth-century date proposed by Colt for the fort's construction is based on a burial inscription of the priest Thomas, who died and was buried in the martyrium in 464. The martyrium is located in the southeastern corner of the complex containing the Church of SS. Sergius and Bacchus, the south wall of which was the batter wall of the old Hellenistic building and also served as the north wall of the Fort. Since the architectural evidence indicates that the fort was erected prior to the church buildings, the former must antedate 464, when the burial was made in the martyrium.⁵

1. Colt, *Excavations at Nessana, Volume 1*; L. Casson and E. L. Hettich (eds.), *Excavations at Nessana, Volume 2: Literary Papyri* (Princeton: Princeton University Press, 1950); Kraemer, *Excavations at Nessana, Volume 3*.

2. Negev has proposed identifying this structure as a Nabatean temple of the Middle Nabatean period. According to him, Urman's recent excavations have indicated that the monumental staircase leading from the lower city to the acropolis dates to the second half of the first century B.C.E., not to the Byzantine period as the Colt expedition assumed. Negev believes therefore that the stairs originally led to the Nabatean temple, not to the fort; see A. Negev, "Nessana," in Stern (ed.), *NEAEHL*, 1146, 1148.

3. Colt, *Excavations at Nessana*, 1.16.

4. *Ibid.*, 16–17.

5. *Ibid.*, 16. P. Colt 15 mentions two brothers serving in the "Numerus of Very Loyal Theodosians" who came from Nessana and lived in Rhinocorura in Egypt. Colt suggested that the fact that this mounted military unit was activated in the early fifth century indicates that it was formed to garrison the fort at Nessana. However, according to B. Isaac and A. Negev, this papyrus could be understood as meaning that the brothers served in this unit while it was based at Rhinocorura. See Isaac, "The Army in the Late Roman East," 458–59 n. 92.

According to A. Negev, the similarity in size between the citadels of Nessana and Aydat (Oboda) indicates that they were planned by the same imperial or provincial military office during the reigns of Diocletian or Constantine the Great. He believes that the fort at Nessana was abandoned before the mid-sixth century, when Justinian held back payments to the *limitanei*.⁶ However, Colt noted that the presence of Umayyad coins from some of the rooms in the fort indicates that it remained in use until the end of Nessana's occupation. Though it is not known how long it continued to serve a military function, the papyri suggest that there were no longer any troops in Nessana by about 600. Colt suggested that after its abandonment by the military, the fort was taken over by the church, which used it as a monastery and perhaps added the rows of rooms along the eastern and western sides. The small finds from these rooms included many spindle whorls, fragments of mirrors and glass, and other household objects. However, the only weapons found in the entire excavations were a spear point from below the floor level of Room 11, and another from below the floor level of Room 15, both from contexts associated with the old Hellenistic building. Since there was no means of communication between the two, Colt assumed that the old Hellenistic building no longer served a military function when the fort was built. In fact, the old Hellenistic building seems to have been destroyed by the builders of the fort.⁷

The next building operation on the hill after that of the fort was the construction of the Church of SS. Sergius and Bacchus (the North Church) and the range of rooms between it and the fort. The church occupied the same space as that of the Hellenistic building and reused its foundations and parts of the lower courses of the external walls. The actual construction is of poor quality, with a significant amount of earlier material. The entrance to the complex was on the southern side of the atrium, or East Court, by way of the old monumental staircase. The space is equally divided between the church and the rooms to the south, the most important of which, Rooms 14 and 16, were originally one room. These were identified by the excavators as a martyrium. This is because inscriptions engraved on the voussoirs of an arch mention a "holy place" and "this holy martyrium." The inscriptions are epitaphs of a priest named Thomas and a deacon named Palladius. The several burials found in these rooms include one dated 464 and another dated 475. These provide a terminus ante quem of 464 for the rooms' construction.⁸ The presence of large numbers of graffiti on the walls of Rooms 9 and 10 suggest that the chapel or martyrium was dedicated to St. Sergius. St. Sergius was a popular soldier-saint during this period, and the Church of SS. Sergius and Bacchus is the only one mentioned in the papyri. The entire complex appears to have been constructed at one time. The presence of Umayyad coins in some of the rooms indicates that the complex remained in use until the end of Nessana's occupation, though it underwent many structural changes and numerous repairs. The papyri were found in Room 8, on the south side of the complex, next to Rooms 14 and 16.⁹

The first of three additions to the original church complex consisted of the chapel, the baptistery, the west end of the south court, and Rooms 3, 11, and 13. The chapel was at first roofed in the usual manner of slabs over arches, as indicated by the presence of arch-pilasters below the present floor level. Later, the floor was raised and a timber roof was constructed. It was divided into two parts by a triple arcade, with the bema slightly higher than the main body of the chapel. The baptistery and the other additions to the west were built partly on a terrace held by a retaining wall. The part of the south court containing the staircase represents an extension of the original court, and any upper rooms over the southern range were also

6. A. Negev, "Nessana," 1145-49; Colt, *Excavations at Nessana*, 1.1-3, 13-16.

7. *Ibid.*, 17.

8. *Ibid.*, 18; Negev has identified these two rooms as a mortuary chapel, suggesting that the martyrium is the basilica itself, in which the remains of the saints were deposited; see A. Negev, "Nessana," 1148.

9. Colt, *Excavations at Nessana*, 1.18-19.

a later addition. An abacus bearing an inscription dated to 601 that was found in the baptistry may indicate when these extensions were made.¹⁰

The next series of additions, which almost doubled the size of the complex, included all of the area to the east of the central block, Rooms 38 and 63, the north court, and the two staircases. The structural material of these enlargements is far superior to that of both the original and the first additions. A very strong retaining wall was built to support the rooms to the east of the church. The east gallery was part of this addition. The large number of tesserae in the collapsed debris seems to indicate that there was an open terrace rather than an enclosed upper storey above the gallery. The great flight of steps down the side of the hill to the lower city was either constructed or reconstructed at this time, because it connects with the upper staircase. The last enlargement included the well at the extreme north end of the hill and the construction of a very heavy retaining wall to buttress the baptistry. The construction of the well involved the raising of the level more than 8 m to match the rest of the floor levels.¹¹

The Church of St. Mary (the South Church), is located on a separate hill to the south of the acropolis. Most of its walls were plundered for building material in World War I. An entrance on the north side of the complex led into a fairly small atrium. A single colonnade on the eastern side of the atrium formed a narthex. A door at the end of the southern aisle led into a chapel with two rows of three columns each and an apse detached from the back wall. A dated inscription of 601–2 mentioning Mary, the Mother of God, on a capital of one of the columns from the nave indicates that the church was probably built before then.¹² Papyri were discovered in Room 3, which is to the west of the chapel and south of the narthex.¹³

Colt's Chronology

According to the final excavation report, there was a burst of building activity at the end of the sixth and beginning of the seventh centuries, reflecting considerable prosperity. The epigraphical evidence indicates that much of this activity took place during the years 601–5, when the existing ecclesiastical structures were added to and remodeled.¹⁴ According to the excavators, the initially tolerant attitude of the Umayyad caliphs did not continue for long after the Muslim conquest. By the mid-eighth century, Nessana had ceased to be an organized community.¹⁵ This conclusion is based primarily on the evidence of the papyri, which fall into two groups dated ca. 602–8 and 674–90.¹⁶ The post-Conquest archive contains about 40 pieces dealing with taxation and compulsory public services, military affairs, private business, farming, and personal matters.¹⁷ The evidence of P. Colt 76 shows that the total population of the village in about 689 could not have exceeded 1500 and that the number was most likely smaller.¹⁸ This corresponds with the calculations made by P. Mayerson, who on the basis of the requisitions for oil and wheat estimated a minimum population of 900–1000.¹⁹ The organization now centered on the capital at Damascus, with the

10. *Ibid.*, 19.

11. *Ibid.*, 19–20.

12. *Ibid.*, 20–21; A. Negev, "Nessana," 1148.

13. Kraemer, *Excavations at Nessana*, 3.3.

14. Colt, *Excavations at Nessana*, 1.21; Kraemer, *Excavations at Nessana*, 3.26–29.

15. Kraemer, *Excavations at Nessana*, 3.35. Over the course of time, the excavators moved this date up; in the first volume, Colt stated that "by the eighth century the decline had already set in," and "by the middle of the ninth century Nessana was no longer an organized community; Colt, *Excavations at Nessana*, 1.23.

16. Kraemer, *Excavations at Nessana*, 3.29.

17. *Ibid.*, 30.

18. Colt, *Excavations at Nessana*, 1.22.

19. P. Mayerson, "The Ancient Agricultural Regime of Nessana," 229.

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10. Ibid., 19.

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16. Kraemer, *Excavations at Nessana*, 3.29.

17. Ibid., 30.

18. Colt, *Excavations at Nessana*, 1.22.

19. P. Mayerson, "The Ancient Agricultural Regime of Nessana," 229.

provincial capital at Gaza. All men except Muslims were subject to the following five taxes: ordinary; poll; land; upkeep of officials; extraordinary. The first four were paid in cash and the fifth in grain. P. Colt 92 and 93 refer to a military unit in operation in or around the year 685, executing orders sent from headquarters in Damascus, Egypt, and elsewhere. The men were registered by tribe in the Arab manner, and they were part of the regular army. Other papyri indicate that farming continued as usual, with remarkable grain yields and that the church continued to function to the end.²⁰ The latest dated inscription is of 630.²¹ Because the latest papyri are dated to ca. 690, the excavators concluded that Nessana was abandoned by the mid-eighth century.²²

The Pottery from the Colt Excavations

In addition to the papyri and inscriptions, evidence for early Islamic occupation at Nessana is provided by the numismatic, glass, and ceramic evidence. Ten coins described in the report as “Arabic” were found, all dated to the end of the Umayyad period (696–750).²³ The glass vessels include numerous types of eighth- to eleventh-century date.²⁴ According to Colt, most of the early Islamic pottery is Umayyad, with only two pieces that can be dated to the Abbasid period.²⁵ However, a review of the ceramic and other finds from Nessana suggests that the town continued to flourish well after the mid-eighth century.

The following analysis of the pottery from the Colt excavations is hampered by several factors. First, the published line drawings are sketchy, small in scale, and of very poor quality. This makes it virtually impossible to identify the types of glazed bowls represented, as well as to distinguish between some of the painted early Islamic Fine Byzantine Ware bowls and Coptic painted bowls. Second, although the provenience of the published pieces is provided, no levels are indicated, and there is no indication as to whether they come from above or below floor levels. The fact that a few pieces are described as coming from the “Lower Level” of some rooms suggests that they are from below floor level, while the majority appear to come from above the floors. Third, the provenience cannot be determined in cases where no explanation is provided for the room abbreviation.²⁶ Fourth, the fact that the pottery was published by type, with a separate grouping into wares, makes it very difficult to match the line drawings with the ware descriptions. Fifth, the fact that no provenience is provided for the coins means that a very valuable source of information is lost. Despite these problems, it is possible to reconstruct the ceramic assemblages by room.

The latest datable published ceramic types include glazed bowls; painted and plain early Islamic Fine Byzantine Ware bowls;²⁷ moldmade, buff ware (“Mefjer ware”) jars and jugs;²⁸ channel-nozzle oil

20. Kraemer, *Excavations at Nessana*, 3.32–35.

21. Colt, *Excavations at Nessana*, 1.22; Kramer, *Excavations at Nessana*, 3.29. If the papyri had not been found, I suspect that the excavators would have placed the decline and end of the settlement at Nessana immediately after the Muslim conquest in the seventh century.

22. Kraemer, *Excavations at Nessana*, 3.35.

23. Colt, *Excavations at Nessana*, 1.23; A. R. Bellinger, “Coins,” in *ibid.*, 75; unfortunately, the provenience of the coins is not provided.

24. D. B. Harden, “Glass,” in Colt, *Excavations at Nessana*, 1.76. To support their conclusion that Nessana was no longer an organized community by the mid-ninth century, the excavators argued that the early Islamic glass “could all very well fall in the earliest part of this period”; Colt, *Excavations at Nessana*, 1.23.

25. Colt, *Excavations at Nessana*, 1.23; for the pottery, see T. J. C. Baly, “Pottery,” in *ibid.*, 270–303; the lamps were published by Colt (*ibid.*), 62–64.

26. For example, “III,” “X,” and “SB”; see *ibid.*, 282.

27. For the glazed bowls represented, see below. For early Islamic Fine Byzantine Ware bowls, see Magness, *JCC*, 193–201, FBW Bowls Forms 1C–1F and 2.

28. See Avissar, “The Medieval Pottery,” 158–59, Type 6; Sauer and Magness, “Ceramics of the Islamic Period,” 477–78.

lamps;²⁹ and steatite or black ceramic bowls.³⁰ All of these have a range from the eighth to tenth centuries; the moldmade, buff ware jars and jugs do not antedate the second half of the eighth century, while glazed pottery is very rare before the ninth century.³¹ The presence of substantial quantities of these types in the Nessana publication corresponds with D. B. Harden's dating of large quantities of glass to the eighth to eleventh centuries and contradicts the excavators' conclusion that the site was abandoned by the mid-eighth century.³² Instead, Nessana appears to have flourished through the Abbasid period, and perhaps into the Fatimid period. The fact that the latest papyri found at Nessana do not postdate 700 does not mean that occupation did not continue long past that date. This is because, although all of the papyri date between 602–8, and 674–90, we know that Nessana had been occupied for centuries before then. No one would argue on the basis of the papyri alone that Nessana was occupied only between 602–8 and 674–90! It is as unreasonable to conclude that the town was abandoned shortly after the date of the latest papyrus that happens to have been preserved and found as it would be to conclude that it was not occupied before the seventh century.

As will be seen, the published pottery indicates that the area of the North Church and the fort were occupied into the ninth and tenth centuries. Colt suggested that, after its abandonment by the military (by ca. 600), the fort was taken over by the church, which used it as a monastery and perhaps added the rows of rooms along the eastern and western sides. He believed that this explained why the small finds from these rooms included many spindle whorls, fragments of mirrors and glass, and other household objects, but no weapons.³³ However, these finds suggest that by the ninth and tenth centuries the fort was being used for domestic purposes, with no connection to either the church or the military authorities. In the final report, the Roman numeral I followed by Arabic numerals indicates that the room or space was located in the North Church or fort. Accordingly, ceramic types of the eighth to tenth centuries are published from the following rooms in that area: glazed bowls;³⁴ painted early Islamic Fine Byzantine Ware bowls;³⁵ unpainted (usually spiral burnished), early Islamic Fine Byzantine Ware bowls;³⁶ locally-produced, deep, hemispherical cups of a relatively thin, hard-fired, gritty light brown or yellow ware;³⁷ moldmade, buff ware ("Mefjer

29. Magness, *JCC*, 258, Oil Lamps Form 5.

30. See Magness, "The Dating of the Black Ceramic Bowl." The steatite and black ceramic bowls from Nessana were published by Colt, *Excavations at Nessana*, 1.60–61, who noted that the majority of small stone objects found consisted of bowls of this type.

31. On the date of the first appearance of Islamic glazed wares in Palestine, see Magness, "The Dating of the Black Ceramic Bowl," 204–5 n. 3; Sauer and Magness, "Ceramics of the Islamic Period," 478; Avissar, "The Medieval Pottery," 75–82; Magness, "The Chronology of Capernaum," 481–86.

32. Another piece of evidence is a personal communication from M. Sharon, cited by Oked, that the paleography of the Arabic inscriptions from Nessana indicates that occupation continued at least until the beginning of the ninth century; see Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 11.

33. Colt, *Excavations at Nessana*, 1.17.

34. Baly, "Pottery," pls. 57:1, 61:4, 4a from I.4; pls. 57:5, 61:1 from I.7; pl. 61:3 from I.12; pls. 57: base, 61:2 from the East Court Cistern; pl. 57:3 from outside the East Gallery; pl. 57:2 from the North Gallery.

35. *Ibid.*, Ware X; some of these are Coptic painted bowls; see pl. 60: C1 from I.4; pls. 60: B11, 61: D4 from I.7; pls. 51: C1, 53:21, 60: C8, 60: B9, 61: D22–25 from I.8; pls. 59:9 (apparently Coptic), 61: D21 from I.9; pls. 50: 2, 60: B2, B3, B17, 60: C15, 61: D6, D13 from I.12; pls. 51: A1; 53: 16, 19, 60: B7, B16, 61: D26 from I.14; pl. 60: B4, 60: C5 from I.15; pls. 50: 2, 4, B14, 51: A4, A8, C4, C5, 60: B5, B10, C9–11, 61: D8–9, D15 from I.21; pl. 60: C3 from I.22; pl. 60: B12 from I.27; pls. 51: C3, 60: B13 from I.29; pls. 50:5, B1, 51:B, 53:15, 60: B8, B14, C2, C7 from I.31; pl. 60: B15 from I.32; pl. 60: C4 from outside the East Gallery; pls. 50:S, 60: B6, 61: D27 from the North Wall; pl. 61: D28 from the West Wall; pl. 60: C6 from the North Church. See Magness, *JCC*, 170, 193.

36. Baly, "Pottery," Ware X; see pl. 58:31 from I.4; pl. 50:6, Bases 1 from I.7; pl. 51: C6 from I.12; pl. 50: B2, B15 from I.15; pl. 53:17 from I.21; pl. 50: A1 from I.29. See Magness, *JCC*, 193–201.

37. Baly, "Pottery," pl. 51: A4 from I.9; pl. 51: A3a, B3 from I.21. These are early Abbasid "Mahesh ware" imitations of the deep, hemispherical, early Islamic Fine Byzantine Ware cups and bowls; see Whitcomb, "Mahesh

ware”) jars and jugs;³⁸ channel-nozzle oil lamps;³⁹ and steatite or black ceramic bowls.⁴⁰

The largest quantities of published pottery of eighth- to tenth-century date come from Rooms 4, 7, 8, 12, 14, 21, and 31. These are the rooms around the southern and eastern periphery of the North Church complex, including the room with the papyri (8), and the East Gallery (21).⁴¹ An intact channel-nozzle oil lamp was found “below [the] floor in I.10,”⁴² which was located just to the north of the two rooms identified by Colt as the martyrium (Rooms 16 and 14) in the North Church complex, and provided access to them. The lamp must be associated with the last phase of rebuilding noted in this room by the excavators:

The irregular line of the north wall of the Martyrium is remarkable, even in the architecture of this district and period where irregularity was the rule, but there is no trace of the wall having been moved from its original position, though there is evidence of a large amount of repair and rebuilding. The two arches flanking the doorway to [Room] 14 had arch-pilaster caps reused as their base stones and one of them has, set in its southern pilaster, a carved decorative stone so low as to be at least partly below floor level. It is obvious that Byzantine material would not be found reused in the earliest section of the building except as repair work, and from the re-building of several roofing arches it seems likely that a considerable collapse had occurred. . . . The floor of the Martyrium was 40 cm. below that of the entrance room, Room 10, and no stone paving was found, nor the cement bed of any.⁴³

The presence of this oil lamp below the floor of Room 10 suggests that substantial reconstruction and repair work was still being carried out in the ninth to tenth centuries. In addition, a nearly complete Islamic saucer oil lamp was found in Room 15, which is located next to and to the west of Room 7, on the south side of the North Church complex. It represents the earlier variant of this type, which is characterized by a large oil container and rounded or flattened base, and dates from the eighth to tenth centuries.⁴⁴

The pottery published from the South Church (referred to by the Roman numeral II) attests to eighth- to tenth-century occupation there as well. This pottery includes: painted early Islamic Fine Byzantine Ware (or Coptic) bowls;⁴⁵ unpainted (usually spiral burnished), early Islamic Fine Byzantine Ware bowls;⁴⁶ and moldmade, buff ware (“Mefjer ware”) jars and jugs.⁴⁷ Finally, a considerable amount of early Islamic pottery is illustrated from Area “X,” whose identity is not provided in the publication. It includes painted early Islamic Fine Byzantine Ware (or Coptic) bowls;⁴⁸ moldmade, buff ware (“Mefjer ware”) jars and jugs;⁴⁹ and channel-nozzle oil lamps.⁵⁰

Ware,” 281, fig. 4:a–o (some of which have painted designs); Magness, *JCC*, 193–201. For other examples, see Nevo, *Pagans and Herders*, PPL 3:13–19; 6:16–20.

38. Baly, “Pottery,” pl. 61:7 from I.4; pl. 61:6 from I.14; pl. 61:1–2, 5, 8 from I.21; pl. 61:3 from I.31; pl. 61:4 from the South Church; pl. 61:9 from the North Wall. For this type, see n. 28 above.

39. *Ibid.*, pl. 28:18 from I.1; pl. 28:21 from I.21; pl. 28:20 from I.32; pl. 28:19 from the Fort Cistern. For this type, see n. 29 above.

40. *Ibid.*, pl. 26:6 from I.4; pl. 26:7 from I.21; pl. 26:4 from I.31. For this type, see n. 30 above.

41. Room 12 is the first in the row of rooms along the western side of the fort’s courtyard.

42. Colt, *Excavations at Nessana*, vol. 1, pl. 28:16. The very high tongue handle and rounded rather than oval shape of the body point to a relatively late (9c–10c) date for this lamp; see Magness, *JCC*, 258, Oil Lamps Form 5.

43. W. Kendall, “Architectural Report,” in Colt, *Excavations at Nessana*, 1.40.

44. Colt, *Excavations at Nessana*, vol. 1, pl. 28:24; see Avissar, “The Medieval Pottery,” 196–97.

45. Baly, “The Pottery,” pls. 50:3, B12, 60:C13, 61:D2, D16 from II.1; pls. 50:1, 61:D1.

46. *Ibid.*, pl. 50: B8 from II.1.

47. *Ibid.*, pl. 61:4, which appears to bear an Arabic inscription.

48. *Ibid.*, pls. 50:3, A10, B13, 51: A2, C2, C3a, 53:18, 60: C12, C14, 61: D3, D7, D11, D14, D17, D18.

49. *Ibid.*, pl. 61:1.

50. Colt, *Excavations at Nessana*, vol. 1, pl. 28:17.

Urman's Excavations at Nessana

Since 1987, D. Urman has been conducting renewed excavations at Nessana. Though no results have yet been published, valuable information appears in S. Oked's M.A. thesis.⁵¹ Oked mentions that Urman's excavations have uncovered the remains of a large church on the eastern slope of the tel and a monastery on the northern slope of the tel, below the North Church.⁵² Her study focuses on the pottery from two out of an undisclosed number of private houses excavated to date by Urman. One is located in Area C, and the other is in Area A. Both areas were located to the east of the South Church (Church of St. Mary), with Area A located to the north of Area C.⁵³ Oked only studied pottery from "sealed" loci; that is, she did not include material from the open courtyards or corridors, which were disturbed. The house in Area C consisted of seven rooms, two open courtyards, and one corridor. On the basis of the presence of a coin of Justin II (565–78) on the floor of Room 4, Oked suggested that the house was built in the sixth century. Two architectural and occupation phases could be clearly distinguished in this house, represented by the addition of walls, changes in the doorways, and the presence of two floor levels. According to Oked, these modifications were made in the late sixth or early seventh century, since a number of coins were found inside the later walls—the latest of which were a coin of Phocas (602–610), a coin of Heraclius (610–641), and an anonymous Umayyad issue from the mint at Ramla. She also noted that a broken "Arabic" coin was found in the wall built to block the doorway into Room 5, beside a fragment of a "Mefjer ware" jug.⁵⁴

Oked illustrated the pottery by assemblage, discussing the material from above the earlier floor (below the later floor) and above the later floor separately. Since no pottery or coins are published from under the earlier floor, there is no basis for determining the construction date of the house. Instead, the pottery found above that floor provides a terminus ante quem for the house's construction, and indicates the end date of that occupation phase.⁵⁵ The pottery from this phase includes examples of African Red Slip Ware Form 99, dated ca. 510–620;⁵⁶ African Red Slip Ware Form 104, dated ca. 530–625;⁵⁷ Late Roman "C" (Phocean Red Slip) Ware Form 3, dated mainly mid-fifth to mid-sixth centuries;⁵⁸ Cypriot Red Slip Ware Form 9, dated ca. 550 to the end of the seventh century;⁵⁹ and Egyptian Red Slip "A" and "B" Ware.⁶⁰ Other chronologically diagnostic pieces found above this floor are a bowl of mid-sixth to late-seventh-century date,⁶¹ an eighth- to ninth-century deep, hemispherical cup,⁶² Gaza amphoras with a variety of

51. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*. I am grateful to Sarit Oked for giving me a copy of her thesis.

52. *Ibid.*, 4–5.

53. *Ibid.*, abstract.

54. *Ibid.*, 15.

55. *Ibid.*, 15–44; pls. 1–6.

56. *Ibid.*, 22, pl. 1:1; see Hayes, *LRP*, 152–55.

57. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 22, pl. 1:2; see Hayes, *LRP*, 160–66.

58. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 22, pl. 1:3; see Hayes, *LRP*, 329–38.

59. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 22, pl. 1:4–6; the first two are identified by Oked as CRS Forms 1 and 2, respectively; see Hayes, *LRP*, 378–82.

60. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 22, pl. 1:7–10 (ERS "A") and pl. 1:11 (ERS "B"); see Hayes, *LRP*, 387–99; Hayes notes that most of the examples of ERS "A" found outside Egypt date to the seventh century (*ibid.*, 397). The ERS "B" rim illustrated by Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 22, pl. 1:11 is clearly an imitation of Late Roman "C" (Phocean Red Slip) Ware Form 10 Type C, dated to the early to mid-7c; see Hayes, *LRP*, 343–46.

61. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 22, pl. 1:12; Magness, *JCC*, 194, FBW Bowls Form 1A.

62. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 22, pl. 1:13; Magness, *JCC*, 196, FBW Bowls Form 1E.

rim profiles,⁶³ and a jar of light yellow ware painted with dark red circles of eighth- to ninth-century date.⁶⁴ The presence of only two pieces representing types of eighth- to ninth-century date suggests that the deposits above the lower floor were sealed when the upper floor was laid early in the eighth century. The pottery found above the earlier floor points to a range from the sixth century (probably the mid-sixth century or later) to the early eighth century for this occupation phase.

The pottery found above the later floor of the house provides a date for the latest occupation phase.⁶⁵ The few residual Late Roman Red Wares include an example of Cypriot Red Slip Ware Form 9, dated ca. 580/600 to the end of the seventh century,⁶⁶ and three fragments of Egyptian Red Slip "A" Ware.⁶⁷ The other chronologically diagnostic pieces include bowls of eighth- to tenth-century date,⁶⁸ an early Abbasid, locally-produced, deep hemispherical bowl of thin, gritty ware,⁶⁹ and a type of basin of light yellow ware common in the southern coastal region in the sixth to seventh centuries.⁷⁰ There are also a large number of Gaza amphoras and southern Palestinian bag-shaped storage jars.⁷¹ The latest pieces, which include a storage jar with swollen neck made of coarse brown ware of the late seventh to ninth or tenth centuries,⁷² another red-painted jar,⁷³ and a moldmade, buff ware ("Mefjer ware") jar⁷⁴ indicate that this occupation phase dates to the eighth to ninth or tenth centuries.

The house in Area A, which consists of a row of three rooms with a courtyard, was located on the northeast slope of the Church of St. Mary and was directly connected with it. The house had only one occupation level and was destroyed by a fire that caused the ceiling to collapse.⁷⁵ The chronologically diagnostic pottery found on top of the floors inside the three rooms includes examples of Cypriot Red Slip Ware Form 9,⁷⁶ a painted Coptic bowl,⁷⁷ a basin of sixth- to seventh-century date,⁷⁸ a large number of Gaza amphoras and southern Palestinian bag-shaped storage jars,⁷⁹ and an imported amphora of early-

63. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 43, pl. 6:1–6; Majcherek, "Gazan Amphorae," 163–78.

64. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 44, pl. 6:24; see Magness, "The Dating of the Black Ceramic Bowl." The less chronologically diagnostic types of cooking vessels, storage jars, and jugs and juglets found in the assemblages illustrated by Oked are not discussed here.

65. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 66–82; pls. 13–18.

66. *Ibid.*, 69, pl. 13:1; see Hayes, *LRP*, 378–82.

67. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 69, pl. 13:2–4; see n. 60 above.

68. *Ibid.*, 69, pl. 13:5–6; see Magness, *JCC*, 196, FBW Bowls 1D.

69. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 69, pl. 13:7; see n. 37 above.

70. *Ibid.*, 69, pl. 13:9; Magness, *JCC*, 160.

71. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 81, pl. 18:1–14; for the Gaza amphoras, see Majcherek, "Gazan Amphorae." Some of the bag-shaped storage jars have clay concretions around the rim and neck like those found on Gaza amphoras; see Magness, "The Pottery from Area V/4," 135. The presence of a large number of these types in this context, unless they are all residual, suggests that their production may have continued into the eighth century. Also note the dark-surfaced, white-painted northern Palestinian bag-shaped storage jar fragment in Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 82, pl. 18:19; a few fragments of this ware are published from the Negev highlands sites; see the chapter on the central Negev.

72. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 82, pl. 18:15; Magness, *JCC*, 230–31, Storage Jars Form 7.

73. Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, 82, pl. 18:18; see n. 64 above.

74. *Ibid.*, 77, pl. 17:4; see n. 28 above.

75. *Ibid.*, 45–65; pls. 7–12.

76. *Ibid.*, 48, pl. 7:1–3; see n. 59 above.

77. *Ibid.*, 48, pl. 7:6; the painted jug in pl. 11:4 might also be Coptic.

78. *Ibid.*, 48, pl. 7:10; see n. 70 above.

79. *Ibid.*, 64–65, pl. 12:1–18, 20–22; see n. 71 above.

fifth- to mid-seventh-century date.⁸⁰ These types point to a sixth- to seventh- or early-eighth-century date for the final occupation of this house.

The evidence presented by Oked complements that published from the Colt excavations and confirms that occupation at Nessana continued during the eighth to ninth or tenth centuries.

Shivta

Shivta (Arabic, Isbeita or Subeita; ancient Sobata) is a town in the central Negev Desert, about 40 km (25 miles) southwest of Be'er-sheva^c. It was founded in the early Roman period and flourished during the late Roman and Byzantine periods. Large-scale excavations were conducted from 1934–36 under the direction of Colt, on behalf of New York University and the British School of Archaeology in Jerusalem.⁸¹ From 1958 to 1960 the buildings and streets were cleared by the Israel Parks Authority, under the direction of M. Avi-Yonah. Some small-scale excavations were carried out from 1979 to 1982 by A. Segal on behalf of Ben-Gurion University.⁸² No final reports describing the stratigraphy, pottery, coins, and small finds have been published from any of these excavations. Instead, most of the publications focus on the architecture and layout of the town and on ancient agriculture.⁸³

The Byzantine town covers an area of about 20 acres. It was not walled and did not have a fortified citadel, although the houses and the walls of their courtyards and gardens were built in continuous lines that terminated at the end of nine streets. There was a gate at the end of each street that could be locked. The houses and their spacious courtyards were separated by wide streets, and there were three city squares.⁸⁴ Of the three churches excavated by the Colt expedition—the South Church, Central Church, and North Church—only the plan of the first has been published.⁸⁵ Installations discovered in the buildings adjoining the North Church and at two other locations in the town identified by the Colt expedition as bathhouses, have been identified by Negev as winepresses, similar to those found at Avdat and Halutza.⁸⁶

Shivta was apparently not destroyed or damaged at the time of the Muslim conquest. Instead, occupation continued without interruption into the early Islamic period. This is attested by several finds. First, an inscription in the floor of the southern aisle of the South Church states that the (new) pavement was laid in 640 C.E., six years after 'Amr's capture of Gaza, and this floor shows signs of considerable use.⁸⁷ Second, other inscriptions indicate that members of the local clergy were still being buried in the North Church as late as 679 C.E.⁸⁸ The third find is a mosque that was built in a room immediately to the north

80. Ibid., 65, pl. 12:19; see Peacock and Williams, *Amphorae and the Roman Economy*, 185–87, Class 44. The flask in pl. 11:13 has close parallels from 7c to early 8c contexts at Sde Boqer (see Nevo, *Pagans and Herders*, PPL 6:6–9) and Rehovot-in-the-Negev (see Rosenthal-Heginbottom, "The Pottery," 88, III. 133; 89, pl. III:140).

81. A drought in the winter of 1935–36 forced the Colt expedition to suspend its work at Shivta and move to Nessana; see Colt, *Excavations at Nessana, Volume 1*, "Foreword." For summaries of the excavations, see A. Negev, "Sobata," in Stern (ed.), *NEAEHL*, 1404–10; D. Groh, "Subeita," in E. M. Meyers (ed.), *The Oxford Encyclopedia of Archaeology in the Near East* (New York: Oxford University Press, 1997) 5.89–90.

82. Negev, "Sobata," 1405.

83. A. Segal, *The Byzantine City of Shivta (Esbeita), Negev Desert, Israel* (BAR International Series 179; Oxford: BAR, 1983); Y. Kedar, "Ancient Agriculture at Shivtah in the Negev," *Israel Exploration Journal* 7 (1957) 178–89; A. Negev, "The Churches of the Central Negev: An Archaeological Survey," *Revue Biblique* 81 (1974) 400–421.

84. Negev, "Sobata," 1404–5.

85. Ibid., 1406–7.

86. Ibid., 1409.

87. C. Baly, "S'baita," *Palestine Exploration Fund Quarterly Statement* 67 (1935) 173; Negev, "Sobata," 1407.

88. Negev, "Sobata," 1409.

of the baptistery of the South Church. Its mihrab penetrates slightly into the baptistery, apparently blocking an original northern door. The mosque's floor was paved with limestone slabs.⁸⁹ Kufic inscriptions dating to the ninth century, one of which records the building of the mosque by a certain Hassan, were incised on the arch voussoirs. More Kufic inscriptions of the same date were incised in the plaster of the northern wall of the atrium and the northern exedra of the narthex of the North Church. They are mainly invocations to God.⁹⁰

What little of the Byzantine and early Islamic pottery and coins from Shivta that has been published to date all comes from the Colt excavations.⁹¹ It consists mostly of random pieces included by Baly with the Nessana pottery to "fill in the gaps."⁹² The illustrated pottery includes Late Roman "C" (Phocean Red Slip) Ware Form 3,⁹³ African Red Slip Ware Form 104,⁹⁴ Fine Byzantine Ware cups or bowls with an incised wavy line,⁹⁵ painted and unpainted early Islamic Fine Byzantine Ware bowls,⁹⁶ and casseroles with wish-bone handles.⁹⁷ More types from Shivta are mentioned but not illustrated in Baly's description of the Nessana pottery plates. These include African Red Slip Ware Form 99⁹⁸ and Cypriot Red Slip Ware Form 9.⁹⁹

More information can be gleaned from G. M. Crowfoot's article on Nabatean pottery. Although she referred to "Byzantine and Arab" pottery from Deposit 2, the only Byzantine piece illustrated is a complete Cypriot Red Slip Ware Form 9 bowl.¹⁰⁰ Crowfoot also mentions a Fine Byzantine Ware bowl with an incised wavy line,¹⁰¹ a wheelmade ("Persian") oil lamp,¹⁰² and one small fragment of moldmade "Mefjer" ware.¹⁰³ Deposit 2 contained 44 coins ranging in date from the reign of Constantius II (326–61) to the "late Byzantine" period, including one Axumite coin. The majority date to the fourth and fifth centuries.¹⁰⁴ Additional pottery, illustrated in Baly's article, includes painted early Islamic Fine Byzantine Ware bowls,¹⁰⁵

89. *Ibid.*, 1407.

90. Baly, "S'baita," 175–77.

91. For the Nabatean pottery, see G. M. Crowfoot, "The Nabataean Ware of Sbaita," *Palestine Exploration Fund Quarterly Statement* 68 (1936) 14–27.

92. Baly, "The Pottery," 270 (footnote), 287.

93. *Ibid.*, pl. 48:B1 (Shape 13); see Hayes, *LRP*, 329–38, dated mainly mid–5c to mid–6c.

94. Baly, "The Pottery," pl. 49:1 (Shape 25); see Hayes, *LRP*, 160–66, dated ca. 530–625.

95. Baly, "The Pottery," pl. 50:A3 (Shape 35); see Magness, *JCC*, 193–94, FBW Bowls Form 1A, dated mid–6c to late 7c/early 8c.

96. Baly, "The Pottery," pls. 51:A5 (Shape 65), 61D:20 (Ware X); see Magness, *JCC*, 193–201, FBW Bowls Forms 1C–1F and 2, dated 7c to 9c/10c.

97. Baly, "The Pottery," pl. 52:1 (Shape 76); see Magness, *JCC*, 213, Casseroles Form 2, dated 6c–7c. The other pottery from Nessana illustrated by Baly is: pl. 51 (Shapes 69, 71); pl. 51:A2 (Shapes 54 and 55; their red painted decoration suggests that these pieces are Coptic or early Islamic); pl. 51:1:10 (Shape 63); pl. 53 (Shape 110); pl. 53:2 (Shape 54); pl. 53:2 (Shape 88); pl. 53:A1 (Shape 98); pl. 53:1 (Shape 112); pl. 52:1; pl. 56 (Shape 135).

98. Baly, "The Pottery," 288 (Shape 11), "It occurs fairly frequently at Sbeita . . ."; see Hayes, *LRP*, 152–55, dated ca. 510–580/620.

99. Baly, "The Pottery," 288 (Shape 12), "very frequent at Sbeita . . ."; see Hayes, *LRP*, 378–82, dated ca. 550 to end of 7c. Other types mentioned by Baly from Shivta are Shape 26 (apparently a Late Roman Red Ware bowl), Shape 72 (apparently the type of basin characteristic of the southern coastal region in the 6c–7c; see Magness, *JCC*, 160); and Shape 75 (shallow casseroles).

100. Crowfoot, "The Nabataean Ware of Sbaita," 25–26, fig. 1; see Hayes, *LRP*, 378–82, dated ca. 550 to the end of the 7c.

101. Crowfoot, "The Nabataean Ware of Sbaita," 26; see Magness, *JCC*, 193–94, FBW Bowls Form 1A, dated mid–6c to late 7c/early 8c.

102. Crowfoot, "The Nabataean Ware of Sbaita," 26; see Magness, *JCC*, 129, dated 6c–7c.

103. Crowfoot, "The Nabataean Ware of Sbaita," 26; see n. 28 above.

104. *Ibid.*, 26.

105. Baly, "S'baita," 180, "pl. VI, fig. 1 shows a painted ware. It has a red body showing a black centre to a fracture. The clay is well washed and takes a fairly high burnish. It is a thin ware. The designs are floral and geometric

and moldmade, buff ware (“Mefjer ware”) jars and jugs.¹⁰⁶ The evidence reviewed here suggests that Shivta flourished during the sixth to seventh centuries, with continued occupation at least through the Abbasid period and perhaps into the Fatimid period.

Avdat

The published evidence for early Islamic occupation at the other Byzantine towns of the Negev is even more meager than for Nessana and Shivta. At all of these sites except Rehovot, this is probably due to the lack of publication (of pottery and coins) rather than a lack of evidence. Avdat (Oboda), located in the central Negev highlands, was excavated from 1958 to 1961, 1975 to 1977, and in 1989 by A. Negev. The final reports published to date deal with the architecture, the late Hellenistic and early Roman pottery, and the Nabatean potters’ workshop.¹⁰⁷ According to Negev, a fortress was built on the acropolis during Diocletian’s time. During the Byzantine period, two churches and a monastery were built on the acropolis, replacing earlier pagan temples. Most of the remains of agricultural works in the town’s vicinity belong to this period, which included the cultivation of grapes. Throughout his publications, Negev claims that Avdat was abandoned after the Muslim conquest in 636.¹⁰⁸ The end of the two churches is described in his most recent publication as follows:

Both churches at Oboda were destroyed by fire, though not before the marble furniture was broken into pieces, part scattered, and part burnt. Prof. Avi-Yonah, the excavator of the North Church, tended to assign this destruction to the Persian invasion of 614 C.E. There is, however, no evidence that the Persians ever reached the Negev. Even if this were the case, the conventional route would lead them to Elusa, Rehovot-in-the-Negev, Nessana, and Sobata, and thence to Sinai (?); but destruction by fire was reported for none of the churches of these towns and the North and South Churches at Sobata remained in use throughout the first century of the Arab conquest. The destruction of the churches at Oboda must thus be viewed in terms of the individual history of this city. The latest burial at Oboda is that of an abbot in the South Church in 617 C.E. This inscription dates the burial of the abbot but does not necessarily have any bearing on the church’s destruction. However, the lack of material of the Early Arab period at Oboda dates the destruction of the churches, and possibly also the abandonment of the town, securely in the mid-30s of the 7th century.¹⁰⁹

There is no reason to assume that the Muslims would have so violently destroyed the churches at Avdat, when such destructions are unattested at Nessana, Shivta, and other sites. Unfortunately, the lack of published pottery and coins makes it impossible to evaluate Negev’s chronology. Hints of evidence for early Islamic occupation at Avdat can be gleaned from a brief report on excavations carried out in 1992 under the direction of G. Tahal.¹¹⁰ In describing three small rock-cut rooms inside the “Saints’ Cave,” Tahal mentions that, “A thick layer (0.7 m) of ashes on the sunken floor of the westernmost room contained remains

and are painted on in black, white, blue and yellow after firing—the paint today is very friable.”

106. *Ibid.*, 181; pl. VI, fig. 2; see n. 28 above. On p. 173 Baly refers to “a few fragments of glazed ware dating from the thirteenth and fourteenth century.” The possibility that the glazed pottery is earlier is suggested by Baly’s dating of the buff ware jars and jugs to the 12c to 14c (*ibid.*).

107. For a summary and references, see A. Negev, “Oboda,” in Stern (ed.), *NEAEHL*, 1155–65; also see *idem*, *The Architecture of Oboda*; *idem*, *The Late Hellenistic and Early Roman Pottery of Nabataean Oboda: Final Report* (Qedem 22; Jerusalem: Hebrew University, 1986).

108. See, for example, *idem*, “Oboda,” 1155.

109. *Idem*, *The Architecture of Oboda*, 9. In the next paragraph he continues: “The number of wine presses and other installations connected with the production of wine exceeds anything known from the other towns of the Negev. Perhaps this contributed to the fury with which the churches of Oboda were burnt by the Arab conquerors: unable to exploit this source of riches, the Arabs set the churches on fire.”

110. G. Tahal, “‘Avedat,” *Excavations and Surveys in Israel* 14 (1995) 130–33.

of ropes, wood, textiles, and potsherds of Kh. el-Mefjer ware, attributed to the early Islamic period.”¹¹¹ The presence of buff ware (“Mefjer ware”) vessels points to early Islamic presence (mid–eighth century to ninth century or later) at Avdat.¹¹²

Mamshit

Mamshit (in Greek, Mampsis; in Arabic, Kurnub) is located 40 km southeast of Be’er-sheva’, at the junction of the Jerusalem–Hebron–Aila road and the road to the ‘Arabah and Edom. Excavations were conducted in 1965–67, 1971–72, and 1990 under the direction of A. Negev. The only final report published to date consists of two volumes on the architecture, the second of which includes chapters on the coins and graffiti and dipinti.¹¹³ During the late Roman period, the town was surrounded by a fortification wall, and during the Byzantine period two churches, the Eastern Church and the Western Church (or “Church of Nilus”), were constructed.¹¹⁴ According to Negev, since the latest coins found do not postdate the mid–sixth century, the town was destroyed, probably by “Arab tribesmen,” before the Muslim conquest. He added that it was likely “temporarily occupied” by the Arabs following the conquest.¹¹⁵ In his final report on the architecture, Negev stated that

There is little doubt that the destruction of Mampsis occurred well before the Arab conquest of 636 C.E. Papyrus 39, the only document found at Nessana in which Mampsis is mentioned, is arbitrarily dated to the mid–sixth century. The inclusion of Mampsis in the Madaba Map, dated by Avi-Yonah to the second half of the sixth century, is not necessarily a proof that Mampsis still existed at that time; its inclusion may be anachronistic or may have been considered necessary because of its connection with biblical Tamar. . . . The numismatic evidence points to Justinian’s reign as the end of the town’s life. . . . Mampsis is also the only Byzantine town [in the Negev] in whose churches no funerary inscriptions were found. Apart from two earlier interments at Nessana, burial in the churches of the central Negev begins in December 541 C.E. when a great pestilence began to devastate the Byzantine empire. This fact may perhaps also be taken as an indication that by this date the churches of Mampsis were no longer in use. It thus seems that . . . the small settlement was not strong enough to withstand the onslaught of dissatisfied Arab tribesmen, and Mampsis was finally deserted.¹¹⁶

In his discussion of the coins, Negev noted that

After the numerous coins of the times of Arcadius, the first half of the fifth century is not represented by identifiable coins at all. In fact, only Marcianus, of all of the Byzantine emperors of the fifth century, is represented at Mampsis by one coin. Anastasius, who opens the 6th century, is represented by two coins. His successor, Justin I, is represented by 12 coins. For the rest of the 6th century C.E. there is only a trickle of

111. *Ibid.*, 132; for the “Saints’ Cave,” see also A. Negev, *The Architecture of Oboda*, 163–69.

112. Tali Erickson-Gini and Peter Fabian conducted excavations in the Roman army camp at Avdat in 1999, under the auspices of the Israel Antiquities Authority. During a visit to the site in August 1999, and in earlier conversations, Fabian told me that he believes the Byzantine settlement at Avdat, which was concentrated in and around the caves on the slopes of the acropolis, was destroyed by an earthquake in the early 7c. There is apparently only very limited evidence for early Islamic (8c to 9c) presence at Avdat, mostly in the level on top of the collapsed roofs of the caves. I am grateful to Peter Fabian for sharing this information with me.

113. A. Negev, *The Architecture of Mampsis: Final Report, Volume I: The Middle and Late Nabatean Periods* (Qedem 26; Jerusalem: Hebrew University, 1988); *idem*, *The Architecture of Mampsis: Final Report, Volume II*. Also see *idem*, “Kurnub,” in Stern (ed.), *NEAEHL*, 882–93.

114. *Ibid.*, 882–93.

115. *Ibid.*, 893.

116. *Idem*, *The Architecture of Mampsis: Final Report*, 2.7–8.

Byzantine coins: three of Justinian I, one of Justin II, none of Tiberius II, and one of Mauricius. This is the end of Byzantine coinage at Mampsis. . . . The paucity of coins at Mampsis at the end of the 6th century, and their total absence in the decades preceding the Arab conquest, tempts one to conclude that the destruction of Byzantine Mampsis took place much earlier than at Oboda.¹¹⁷

This conclusion is contradicted by other evidence from Mamshit. First, although Negev noted the almost complete absence of fifth century coinage, he did not conclude that the town was deserted in the fifth century. Why draw such a conclusion for the second half of the sixth century? As he remarked on the previous page, "Strange as it may seem, the great period of construction at Gerasa and other cities of the Decapolis, which began with Trajan and was in full swing during the time of Hadrian, is represented at Gerasa by only 24 coins. Bellinger himself warned against drawing any conclusions from such numismatic phenomena."¹¹⁸ Second, post-Justinianic coins *are* attested at Mamshit: one of Justin II (565–78) and one of Mauricius Tiberius (582–602). Third, the evidence of the Madaba Map, dismissed by Negev, suggests that Mamshit *was* still occupied in the second half of the sixth century. In fact, elsewhere he noted that the North Gate of Mampsis appears to be accurately represented in that map.¹¹⁹

The small amount of Byzantine pottery published to date from Mamshit also indicates that occupation continued through the second half of the sixth and seventh centuries. There are examples of dipinti on amphoras of early fifth- to mid-seventh-century date.¹²⁰ Early Islamic presence is attested by Arabic graffiti on the stones of the apse of the East Church.¹²¹ More recently published evidence for sixth- to seventh-century occupation, as well as for early Islamic occupation, comes from a preliminary report on the 1990 excavations. The description of Building IV, which is located on the slope leading to the East Church, states that "the building continued to function in the Early Islamic period (7th century C.E.) with no architectural changes."¹²² The large residence, Building XII, contained mostly material dating to the fifth century, but pottery of the "Late Byzantine and Early Islamic periods" was also present.¹²³ In 1993–94, T. Erickson-Gini conducted salvage excavations in several areas at Mamshit, under the auspices of the Israel Antiquities Authority. The pottery she found includes Fine Byzantine Ware Form 1A bowls, and examples of Late Roman "C" (Phocian Red Slip Ware) Form 3, African Red Slip Ware Form 105, and Cypriot Red Slip Ware Form 9.¹²⁴ This evidence indicates that the occupation at Mamshit continued

117. *Ibid.*, 74.

118. *Ibid.*, 73.

119. *Ibid.*, 22. For the Madaba Map, see Avi-Yonah, *The Madaba Mosaic Map*; H. Donner, *The Mosaic Map of Madaba*.

120. A. Negev, *The Architecture of Mampsis: Final Report*, 2.111, fig. 14:232 and 113, fig. 15:239. Peacock and Williams, *Amphorae and the Roman Economy*, 185–87, Class 44, date this type from the early 5c to mid-7c. The same type is dated to the 6c–7c by G. F. Bass, "The Pottery," in *Yassi Ada, Volume I: A Seventh-Century Byzantine Shipwreck* (College Station, Tex.: Texas A. & M. University, 1982) 163. The piece in Negev's fig. 15:239 represents Bass's Type 2, characterized by a dark red fabric. This variant is rare at sites in Israel, though it far outnumbered the Type 1 amphoras at the Yassi Ada shipwreck, which apparently sank in about 625. The published dipinti also include the body fragment of a jar of buff ware with a red-painted design; A. Negev, *The Architecture of Mampsis: Final Report*, 2.115, fig. 16:253 (no. 254, which is of greenish ware with a black-painted design, may be the same type). This may be an example of 8c–9c red-painted ware (see n. 64 above).

121. A. Negev, *The Architecture of Mampsis: Final Report*, 2.8; *idem*, "Kurnub," 888.

122. Reported by Negev's assistant: S. Israeli, "Mamshit—1990," *Excavations and Surveys in Israel* 12 (1994) 103.

123. *Ibid.*

124. See T. Erickson-Gini, *Mampsis: A Nabataean Roman Settlement in the Central Negev Highlands in Light of the Ceramic and Architectural Evidence Found in Archaeological Excavations during 1993–1994* (M.A. Thesis, Department of Archaeology and Near Eastern Cultures, Tel Aviv University, 1999) figs. 17.4, 17.6–17.7. I am grateful

through the late sixth century and into the seventh century. The Arabic graffiti on the apse of the East Church reflect some sort of early Islamic presence at the site, the nature of which is unclear.

One issue connected with the chronology of Mamshit concerns the fortification wall. On the basis of his 1956 soundings, S. Applebaum dated its construction to the “very late Byzantine” period, corresponding with a period of greatly intensified settlement at Mamshit.¹²⁵ Later, Negev dated the wall’s construction to the time of Diocletian. However, it appears that Applebaum may have been correct after all. Negev based his dating of the fortification system mainly on the coins found in his excavation of its foundations. In one locus (272), “in a pocket underneath the city-wall,” 10 fourth-century coins were found. The coins found in association with the use of the fortification system date from the first to sixth centuries (with the latest two of Justin I). From this, Negev concluded that the fortification system was built no earlier than the time of Diocletian.¹²⁶ As he noted, however, the fourth-century coins provide only a *terminus post quem* for the wall’s construction. Applebaum described the sequence in his sounding by the west wall of the site as follows:

Six levels were reached in the section down to bed-rock, which was struck at a depth of 2.8–3 m. The lowest stratum belonged to the Roman period, with evidence of an earlier (Iron Age I) settlement. Above it was a layer of limestone chips, marking some building activity which was followed by another accumulation of sand, followed by another period of settlement, which was destroyed by violence, as is evidenced by a thick layer of ashes (10 cm.), including calcined plant remains. A Corinthian capital of white marble, probably from a church, was on top of this layer. Over this debris was built a big ashlar construction, which continued below the city wall, and a road. The city wall was constructed over these remains; after another conflagration, a tower (?) and an oven were added to it. The top level was particularly rich in pottery. The provisional results of the sounding were: (a) all levels, except the lowest, belong to the Byzantine period, (b) there was a partial or total destruction of the site not before the beginning of the fifth century A.D., (c) the city wall was a very late Byzantine construction, corresponding to a period of greatly intensified settlement, (d) there were no early Arab remains on the site.¹²⁷

The presence of a Corinthian-style marble capital in the layer of ash beneath the wall suggests that the fortifications were constructed late in the Byzantine period, if not later. Negev’s description of a 0.4-m-thick layer of earth mixed with ashes containing “Late Roman” pottery, which covered the tops of the walls in Locus 272 and underlay the fortification wall, seems to correspond with the thick layer of ash noted by Applebaum. This layer was also noted in Israeli’s preliminary report describing a trial trench excavated in 1990 along the inside of the west city wall: “A trial trench along the inside of the wall was dug northwest of the West Church to determine whether a gate had existed there in addition to the postern located further north. . . . A one meter thick ash layer, which contained fragments of store jars and jugs of the Roman and Byzantine periods, was uncovered.”¹²⁸ Unfortunately, Israeli did not describe the position of this ash layer relative to the wall and suggested that it was laid down intentionally, instead of being the result of a conflagration.¹²⁹

to Tali Erickson-Gini for giving me a copy of her thesis and for her permission to cite it here. For FBW Bowls Form 1A, dated mid-6c to late 7c/early 8c, see Magness, *JCC*, 193–94; for LRC Form 3, dated mid-5c to mid-6c, see Hayes, *LRP*, 329–38; for ARS Form 105, dated ca. 580/600–660+ see *ibid.*, 166–69; for CRS Form 9, dated ca. 550 to end of 7c, see *ibid.*, 379–82. No ceramic types that postdate the seventh century are represented. None of the 30 identifiable coins that Erickson-Gini found in her excavations postdates the fourth century.

125. S. Applebaum, “Mamshit,” *Israel Exploration Journal* 6 (1956) 262–63.

126. A. Negev, *The Architecture of Mamshis: Final Report*, 2.24.

127. *Ibid.*, 262–63.

128. Israeli, “Mamshit—1990,” 103.

129. *Ibid.*, 104.

Halutza

Halutza (in Greek, Elusa; in Arabic, Khalasa) is located about 20 km southwest of Be'er-sheva'. It appears on both the Tabula Peutingeriana, and on the Madaba Map. It is mentioned frequently in the Nessana papyri as a district capital. The first exploratory excavation was conducted in 1938 by the Colt Expedition, under the direction of T. J. Colin Baly. In 1979–80 Negev conducted excavations at the site, mainly in the theater and in the East Church.¹³⁰ Excavations at the site resumed in 1997 under the direction of H. Goldfus of Ben-Gurion University. No final excavation reports have been published by Negev to date on his excavations at Halutza, and no Byzantine or early Islamic pottery or coins are described or illustrated in any of the preliminary reports.¹³¹ Nevertheless, Negev noted that the bilingual Arabic and Greek papyri from Nessana, dated from 674 to 689 (P. Colt 60–67), indicate that Elusa retained its status as a district city in the early Islamic period.¹³²

Rehovot-in-the-Negev

Rehovot-in-the-Negev (henceforth referred to as Rehovot; in Arabic, Khirbet Ruheibeh), whose ancient name is unknown, is the second largest of the Negev towns, after Halutza. It was built on a flat hill overlooking Nahal Shunra, a tributary of Nahal Besor, and a deep and abundant well was dug in the riverbed. Excavations were conducted in 1975–79 and in 1986 by Y. Tsafir of the Hebrew University of Jerusalem. The town reached the height of its prosperity during the fifth and sixth centuries, when it covered an area of about 30 acres, with an estimated population of 4000–5000. Two churches were built inside the town and two more were built outside of it, to the south of the well and to its north. The inhabitants' main source of livelihood was agriculture, based on cultivating the loess in the wadi beds, which were irrigated by flood waters.¹³³ According to Tsafir, although there are no signs of a violent destruction, the town began to decline after the Muslim conquest, and was probably abandoned by about 700. This conclusion is based on the following observations: "No decorated or glazed Arab pottery characteristic of the eighth and following centuries has been found at the site, an indication that some time after 700 the town was already almost completely deserted. Those empty buildings that had not yet fallen into ruin were intermittently occupied by nomads who left behind them temporary installations, remains of fires and ashes, pottery for domestic use, a few coins, and some Kufic inscriptions."¹³⁴

Though the apparent absence of Mefjer ware and glazed pottery provides a ninth-century terminus ante quem for the settlement, other evidence suggests that occupation continued well into the eighth century. This appears to represent a more permanent and large-scale occupation than one associated with squatters and nomads. The following is a collection of the references to "squatter occupation" in the final report. Although this volume is devoted to the Northern Church, it includes descriptions of several buildings inside the town: a house in Area A, houses in Area B, the Khan in Area C, and the Central Church (Area D). These focus on the architecture, with some of the pottery and small finds mentioned in passing. In a room in one of the houses in Area B, Tsafir describes thick layers of ashes and pottery fragments, separated by thin layers of sand and loess, above floors from which some of the paving stones had been robbed. He attributed this activity to a succession of "temporary occupants" who built ovens and hearths and piled up the ashes

130. See A. Negev, "Elusa," in Stern (ed.), *NEAEHL*, 379–83.

131. See especially idem, "Survey and Trial Excavations at Halutza (Elusa), 1973," *Israel Exploration Journal* 26 (1976) 89–95; idem, "Halutza—1980," *Excavations and Surveys in Israel* 1 (1982) 34–35.

132. Idem, "Elusa," 380.

133. Y. Tsafir and K. G. Holum, "Rehovot-in-the-Negev," in Stern (ed.), *NEAEHL*, 1274–77.

134. Y. Tsafir et al., *Excavations at Rehovot-in-the-Negev, Volume I: The Northern Church* (Qedem 25; Jerusalem: Hebrew University, 1988) 8. This is the only final report on the excavations published to date.

near the walls, after plundering the paving stones. The layers of sand and loess deposited by the frequent dust storms in the area separated these occupation levels, until finally the arches of the roof caved in.¹³⁵ Some of the rooms in Area B contained a wealth of finds, whereas others were almost empty. Tsafir attributed an especially rich deposit in a courtyard in front of one of the buildings to gatherings of local people and “wayfarers,” who left layers of potsherds and ashes.¹³⁶

In the Khan (Area C), the paving stones had been plundered in the two rooms that were completely excavated. Evidence that the building was occupied after its initial abandonment was found in the courtyard, where a water conduit had been built of reused stones. A room was constructed in a corner high above the debris and paved with stones plundered from other rooms. Byzantine architectural fragments incorporated in the walls had perhaps originated in a nearby church. According to Tsafir, this is the only structure, apart from some provisions for water supply and modest temporary installations, that was built in the early Islamic period.¹³⁷ However, his attribution of this occupation to squatters is contradicted by the photograph of the room, which shows smooth, well-fitted masonry walls and a stone pavement of high quality.¹³⁸

There are also references to squatter occupation throughout the Northern Church. Tsafir noted that the fact that the latest burial inscriptions in the church do not postdate the mid-sixth century does not indicate that its use ceased at that time. On the contrary, the evidence indicates that the church existed until the beginning of the Islamic period. Several Kufic inscriptions incised on stones and walls show that parts of the building were subsequently used in the early Islamic period, according to Tsafir, probably by “squatters” in the eighth century. Parts of the marble screen and other architectural fragments were reused to block doors or build provisional fixtures. The main hall of the church was robbed of most of its pavement slabs, and its marble panels were taken and probably burned for lime plaster. No signs of squatting were found in the main hall of the church, probably because by the early Islamic period the wood of the roof had been taken.¹³⁹ The fact that many of the slabs were robbed, that almost no finds were collected in the nave and the aisles except for architectural fragments, and that no substantial layer of ashes was found led Tsafir to conclude that Rehovot’s demise was the result of a long process of neglect, instead of a sudden destruction.¹⁴⁰

During the early Islamic period, a “primitive” 40-cm-high bench made of stones was installed near wall 4 in L505, a room in the southeast corner of the church behind the apse. A cupboard was built into the wall, and another rough, small fixture of uncertain shape and function was installed near the center of wall 1. Seven coins were found scattered on the floor level near this installation, including four that were lying on the floor in the middle of the room, and one from above the bench in the southwest corner of the room. Except for an Umayyad coin minted at Ramla between 716 and 750, the coins were badly damaged and undecipherable. The Umayyad coin was found in the debris at ca. 282.15 m, about 75 cm above the floor. L505 was completely filled with earth and stones. According to Tsafir, all of the sherds and glass fragments from the floor level or close to it are common Byzantine types.¹⁴¹

L509, a room attached to the southwestern side of the church, was filled with debris and rich in small finds. These included large fragments of pottery, marble, glass, and “primitive” fixtures: a column drum in the southeastern corner, an oven close to wall 1 near the entrance, and stones used as benches. There were also fragments of marble from the church’s altar and a Greek inscription. Tsafir suggested these were

135. *Ibid.*, 9.

136. *Ibid.*, 10. Instead, this description suggests to me that some of the rooms were cleared out.

137. *Ibid.*, 11–12.

138. *Ibid.*, 12, Ill. 18.

139. *Ibid.*, 27.

140. *Ibid.*, 27–28.

141. *Ibid.*, 61–62.

collected from the other parts of the church and stored by the "Arab squatters" in this room.¹⁴² He noted that the quantities and types of pottery indicate that this room was used daily. Ashes from fires were discovered all over the floor, especially near the oven. An illegible coin was discovered near the floor, and a lengthy Arabic inscription was incised on the outer face of wall 13.¹⁴³ Numerous sherds and glass fragments were found in the staircase tower (L517), whose doors opened into L509. A carefully executed Arabic inscription was incised on the outer face of wall 12, in the northwest corner of the tower.¹⁴⁴

Architectural pieces with Greek and Arabic inscriptions, not in situ, were found near the entrance to the atrium gate (L519 and 516), on the southeastern side of the atrium.¹⁴⁵ Tsafrir noted that L519 and the rest of the atrium area outside the hall, including the eastern porch (L518, 525, 522) were intensively occupied by the "Arab squatters." A "carelessly made" stone bench was constructed between a rectangular pier and wall 9. The drum of a column was laid on the pavement near the gate, and the gate itself may have been blocked. A wheelmade lamp of sixth- to seventh-century date was found near the bench, above floor level.¹⁴⁶ A large fragment of a water basin was built into an "Early Arab" secondary wall, at the east end of the atrium porch. Another secondary wall, preserved to a height of two to three courses, blocked the atrium from the west, behind the stylobate. A stone found in L522 bore a partial inscription in Kufic.¹⁴⁷ The Northern Chapel (L512, 521), on the northern side of the church complex, was used as a dwelling by "squatters," who threw some fragments of marble chancel screens outside it. They also blocked the door of the narthex, and wrote Arabic inscriptions in black charcoal on the white plaster, mostly near the northeastern corner of the chapel on walls 14 and 15.¹⁴⁸ The chapel was packed with earth and stones. The finds included an intact flask found some 1.5 m above the floor level¹⁴⁹ and a coin of Nero from about 1.39 m above the floor level.¹⁵⁰

According to Tsafrir, the Christian inhabitants deserted Rehovot by about 700. Based on the absence of painted early Islamic pottery, glazed wares, and moldmade, buff wares, the subsequent "Arab squatter" occupation appears to have ended before the end of the eighth century, perhaps in the first half of that century.¹⁵¹ This chronology is supported by the pottery published from the Northern Church, much of which comes from loci associated with the latest phase of occupation (the "squatter occupation").¹⁵² As R. Rosenthal-Heginbottom noted, most of the imported Late Roman Red Wares date from the mid-sixth to late seventh century.¹⁵³ Only five oil lamps were found, all of the wheelmade ("Persian") type, dated to

142. *Ibid.*, 67.

143. *Ibid.*, 67–68; see Y. D. Nevo, "The Arabic Inscriptions," in *ibid.*, 190–91, INS. 5; this was not a "coherent" text but a collection of unconnected words inscribed in irregular lines.

144. Tsafrir et al., *Excavations at Rehovot-in-the-Negev*, 68–69; Nevo, "The Arabic Inscriptions," 187–89, INS. 1; based on palaeographical considerations alone, Nevo suggested a date in the second or perhaps early third century A.H., that is, in the late 8c to early 9c.

145. Tsafrir et al., *Excavations at Rehovot-in-the-Negev*, 69–70; Nevo, "The Arabic Inscriptions," 190, INS. 4; this graffito scratched on a building stone near the gate could not be deciphered.

146. Tsafrir et al., *Excavations at Rehovot-in-the-Negev*, 71; Rosenthal-Heginbottom, "The Pottery," 81; pl. I:21; see n. 154 below.

147. Tsafrir et al., *Excavations at Rehovot-in-the-Negev*, 72; Nevo, "The Arabic Inscriptions," 189–90, INS. 2; although inscribed in clear lapidary script with well-shaped and deeply carved letters, this inscription is illegible. Nevo dated it on the basis of palaeography to the first–second centuries A.H. (7c–8c).

148. Tsafrir et al., *Excavations at Rehovot-in-the-Negev*, 76.

149. Rosenthal-Heginbottom, "The Pottery," 89, no. 140; see n. 157 below.

150. Tsafrir et al., *Excavations at Rehovot-in-the-Negev*, 76–77; see J. Patrich, "Coins from the Northern Church," in Tsafrir et al., *Excavations at Rehovot-in-the-Negev*, 152; no. 1, Ill. 24.

151. Tsafrir et al., *Excavations at Rehovot-in-the-Negev*, 28.

152. Rosenthal-Heginbottom, "The Pottery."

153. *Ibid.*, 79–81.

the sixth to seventh centuries.¹⁵⁴ There are a number of southern Palestinian, bag-shaped storage jars, Gaza amphoras,¹⁵⁵ and imported amphoras of fifth- to mid-seventh-century date.¹⁵⁶ The complete flask from L521 has close parallels from Sde Boqer and Nessana.¹⁵⁷ Some of the latest chronologically diagnostic pieces appear to be an early Abbasid, deep, hemispherical bowl,¹⁵⁸ and another that may date from the mid-seventh to ninth or tenth centuries.¹⁵⁹ Although Rosenthal-Heginbottom correctly dated this corpus to the sixth to seventh centuries,¹⁶⁰ the parallels cited here, as well as the Umayyad coin and Arabic inscriptions indicate that occupation continued at least until the mid-eighth century.

The extent and quantity of remains associated with the eighth-century occupation, which include ovens, a nicely paved room, coin(s), abundant pottery, walls incorporating reused architectural fragments, benches, installations, and numerous graffiti and inscriptions point to more than just “squatters.” Instead, this evidence suggests that the occupation of the site continued, apparently without interruption (and certainly without destruction) at least through the first half of the eighth century. It is impossible to determine whether the Arab (and probably Muslim) inhabitants of this phase were related to the earlier population. The fact that the remains associated with this phase are not systematically published makes it impossible to reconstruct the extent of this occupation. For example, none of the walls and installations from this phase appears in the published site plans, and only the locations of the Greek, not the Arabic inscriptions are indicated on the ground plan of the Northern Church.¹⁶¹ Evidence for this occupation must be gleaned from scattered references in the text (all of which I have cited here), and occasional photographs which show the remains during the excavations. The manner in which these remains are published has effectively rendered them invisible, transforming a substantial early Islamic occupation phase into a “squatter” occupation.

Conclusion

This review has indicated that there is evidence at all six of the Byzantine towns of the Negev for continued and continuous occupation into the early Islamic period. Due to the lack of publication, it is difficult to ascertain the extent and precise chronology of this occupation. Nessana and Shivta apparently flourished through the Abbasid period and perhaps into the Fatimid period. At Rehovot, occupation appears to have continued until the first half of the eighth century. From the little that has been published, occupation seems to have continued at Mamshit and Avdat into the seventh century (with perhaps a very limited re-occupation in the eighth to ninth centuries). Too little has been published to suggest the end date of occupation at Halutza.

154. *Ibid.*, 80–81; Magness, *JCC*, 129. The presence of this type at Sde Boqer and Nahal Shahaq suggests that it may have continued into the eighth century; see Nevo, *Pagans and Herders*, PPL.7:12; Israel et al., “The Nahal Shahaq Site,” 7*, no. 17.

155. Rosenthal-Heginbottom, “The Pottery,” 80–87; see nn. 71 and 79 above. One storage jar has the infolded rim characteristic of the Jerusalem area in the 6c; *ibid.*, 83, pl. II:91; Magness, *JCC*, 224–25, Storage Jars Forms 4B–4C.

156. Rosenthal-Heginbottom, “The Pottery,” 87, Storage Jars Form 4; see Peacock and Williams, *Amphorae and the Roman Economy*, 185–87, Class 44, and n. 120 above.

157. Rosenthal-Heginbottom, “The Pottery,” 88, Ill. 133; 89, no. 140; Nevo, *Pagans and Herders*, PPL.6:6–9; Oked, *The Pottery of the Late Byzantine and Early Arab Periods*, pl. 11:13; see n. 80 above.

158. Rosenthal-Heginbottom, “The Pottery,” 91, pl. IV:173; see Whitcomb, “Mahesh Ware,” 281, fig. 4:a–o; Nevo, *Pagans and Herders*, PPL.3:13–19; .6:16–20; also see n. 37 above.

159. Rosenthal-Heginbottom, “The Pottery,” 91, pl. IV:174; from the description of the fabric it appears to be a locally-produced version of Magness, *JCC*, 199, FBW Bowls Form 2A.

160. Rosenthal-Heginbottom, “The Pottery,” 94.

161. Tsafirir et al., *Excavations at Rehovot-in-the-Negev*, figs. 7, 11.

CHAPTER 9

Did Syria–Palestine Decline in the Mid–Sixth Century?

The Muslim invasion was more a consequence than a cause of changes which had been taking place over the previous century.¹

Haiman's argument that the Negev farms must have been established during the Umayyad period because they could not date to the period of decline that preceded it is based on an article that H. Kennedy published about Byzantine Syria.² To determine whether this model could apply to the Negev farms, it is necessary to examine its validity for the parts of Syria and Palestine discussed by Kennedy. This chapter begins with a review of Kennedy's theory, followed by a detailed analysis of the archaeological evidence for the northern Syrian villages and the cities of Antioch and Caesarea Maritima.

In his article, Kennedy attempted to account for the fact that Syria and Palestine seem to have fallen relatively easily to the Muslims. This has traditionally been attributed either to the political and military weakness of the Byzantine empire, which was impaired by the long conflict with Persia, or to the new unity acquired by the Arab tribes with the adoption of Islam. As Kennedy noted, though both of these explanations are correct, they do not account for the far-reaching changes in society and culture that accompanied the conquest. He therefore examined the historical and archaeological evidence for Syria and Arabia in the century before the arrival of the Muslims, to find the reasons for the defeat of the Byzantine armies and of Hellenistic civilization.³ The historical sources indicate that the Byzantines lost Syria because the local population did not resist the invaders. According to Kennedy, this is because the cities were economically and demographically too weak to put up any serious resistance to the Muslims. He noted that there are almost no references to merchants or trade and manufactured goods in contemporary historical accounts.⁴ Although some of the desertion of towns and cities may have resulted from the flight of Greeks at the time of the conquest, most of it was probably the result of depopulation over a longer period of time. The historical sources suggest that the cities were no longer important centers of wealth and power, and

1. H. Kennedy, "The Last Century of Byzantine Syria: A Reinterpretation," *Byzantinische Forschungen* 10 (1985) 183.

2. *Ibid.*, 141–83. H. Kennedy later suggested that Umayyad rule saw a significant reversal of the earlier decline; see *idem*, "The Impact of Muslim Rule on the Pattern of Rural Settlement in Syria," in P. Canivet and J.-P. Rey-Coquais (eds.), *La Syrie de Byzance à l'Islam, VII^e–VIII^e siècles: Actes du Colloque international Lyon-Maison de l'Orient Méditerranéen, Paris—Institut du Monde Arabe, 11–15 Septembre 1990* (Damascus: Institut Français de Damas, 1992) 291–97.

3. *Idem*, "The Last Century of Byzantine Syria," 142.

4. *Ibid.*, 147.

that agriculture rather than manufacturing and trade were the main activities. There are no references to thriving ports on the seaboard. The Arabs thus seem to have invaded a demographically depressed and economically primitive land.⁵

Based on his review of the historical and archaeological evidence, Kennedy concluded that, during the sixth century, Syria experienced profound social, economic, and cultural changes, including the decline of the classical city. The cities on or near the Mediterranean coast were most severely affected by the economic and demographic crisis. The shift of population and wealth away from the coast that is usually understood as a result of the Muslim conquest seems to have occurred during the preceding century. Kennedy argued that by the year 600, with the decline of the coastal areas, the nomadization of the steppe-land, and the transformation of urban communities into large urban villages, Syria had acquired its early medieval form. He attributed these changes to a number of factors: the rise of the Ghassanids; the decline of Mediterranean trade; earthquakes; invasions; and the outbreak of bubonic plague in the mid-sixth century. The plague would have hit urban populations harder than rural communities, while nomadic peoples would have been unaffected. This corresponds with the picture of urban decline, survival of rural communities, and nomadic encroachment provided by the literary and archaeological evidence. Kennedy thus concluded that the transition from antique to medieval Syria occurred in the years after 540, not after 640, and that the Muslim invasion was more a consequence than a cause of changes that had been taking place over the previous century.⁶ The published archaeological evidence for most of the sites mentioned by Kennedy in support of his theory is meager. The following analysis examines three of the more fully excavated and published archaeological sites.

The Northern Syrian Villages: Dehes

The remains of some 700 well-preserved ancient villages are located in the barren limestone hills of northern Syria, between the great cities of Antioch to the west, Apamea to the south, and Chalcis to the east. The buildings in the villages are constructed of well-cut, decorated limestone masonry. Many of the houses, churches, and other public buildings still stand to their original height. Until recently, the definitive study of these villages was a three-volume report by G. Tchalenko, based on his survey of the region.⁷ Tchalenko suggested that the prosperity of these villages was due to the cultivation of a single cash crop, the olive. The olive oil that was the product of this monoculture was sold in neighboring cities such as Antioch and generated the profit that supported the village populations. This means that the villages were not

5. *Ibid.*, 148–49.

6. *Ibid.*, 180–83. He discussed the effects of the plague in greater detail in H. Kennedy and J. H. W. G. Liebeschuetz, “Antioch and the Villages of Northern Syria in the Fifth and Sixth Centuries A.D.: Trends and Problems,” *Nottingham Medieval Studies* 32 (1988) 65–90. For more recent discussions of the effects of the plague on maritime trade and the coastal cities of the Mediterranean, see M. McCormick, “Bateaux de vie, bateaux de mort: Maladie, commerce, transports annonaires et le passage économique du Bas-Empire au Moyen Âge,” in *Settimane di studio del centro italiano di studi sull’alto medioevo 45: Morfologie sociali e culturali in Europa fra tarda antichità e alto medioevo* (Spoleto: La Sede del Centro, 1998) 35–122, especially 43–65; C. Dauphin, *La Palestine byzantine: Peuplement et Populations, Volume II* (BAR International Series 726; Oxford: BAR, 1998). In an email communication of 21 March 2000, Robin Brown pointed out to me that “livestock were highly vulnerable to the plague and rural peoples lost their herds.” This means that rural and nomadic populations that were dependent on herding and the raising of livestock could also be devastated by the effects of the plague.

7. G. Tchalenko, *Villages antiques de la Syrie du Nord, Le massif du Bélus à l’époque romaine, I–III* (Paris: Geuthner, 1953–58). For a recent discussion of these villages, see C. Foss, “The Near Eastern Countryside in Late Antiquity: A Review Article,” in J. H. Humphrey (ed.), *The Roman and Byzantine Near East* (Journal of Roman Archaeology Supplementary Series 14; Ann Arbor, Mich.: Journal of Roman Archaeology, 1995) 213–23.

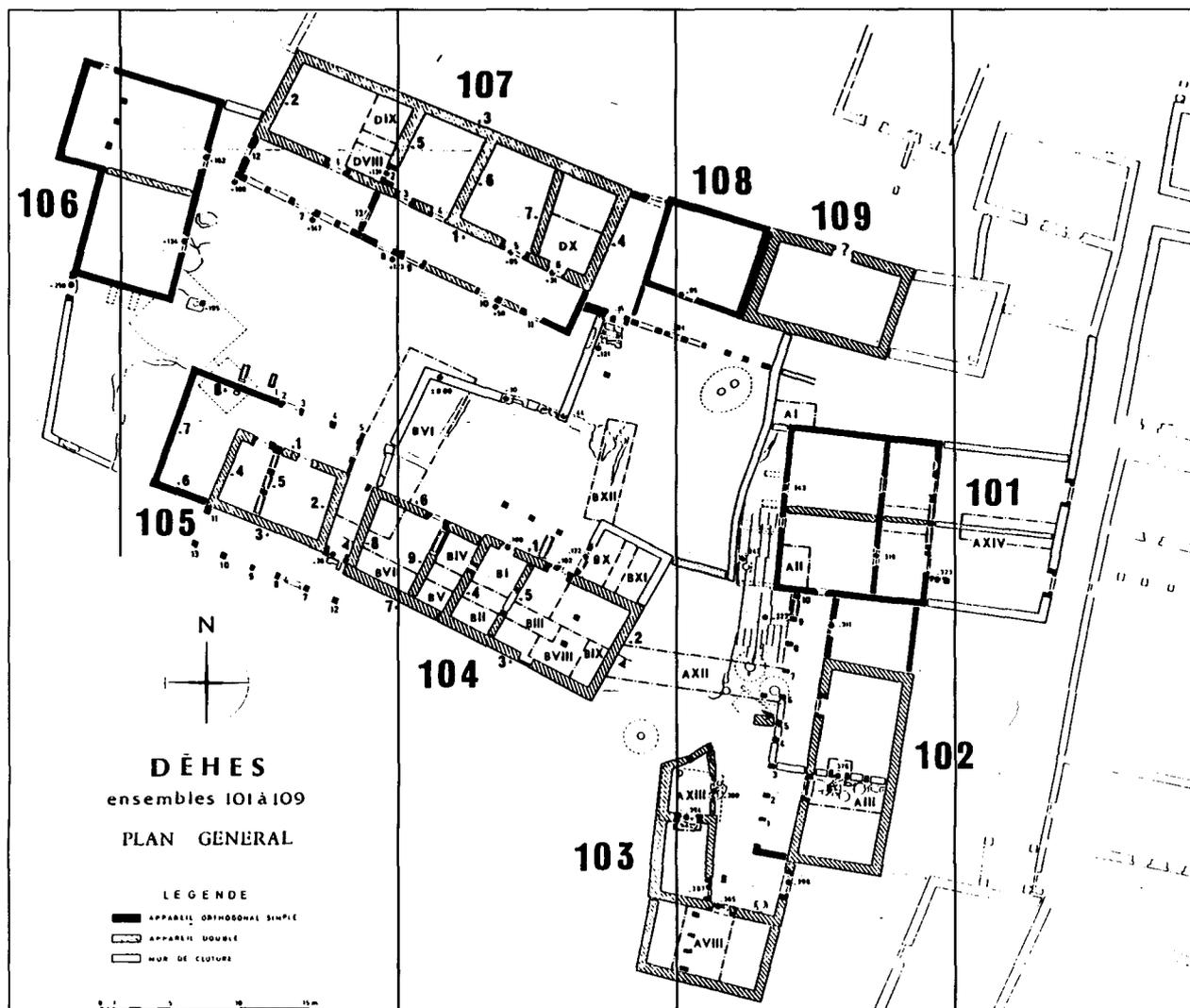


Fig. 9. Plan of the Excavations at Dehes. From J.-P. Sodini et al., “Déhès (Syrie du Nord), Campagnes I–II (1976–1978), *Recherches sur l’habitat rural*,” *Syria* 57 (1980), fig. 5.

self-sufficient peasant communities but were closely integrated into the economy of the surrounding areas and that their survival depended on the existence of a reliable market for their produce.⁸ According to Tchalenko, this rural society flourished from the second century through the sixth century, though during the sixth century Antioch and some of the other cities suffered from earthquakes, plagues, and enemy invasions. During this last phase the villages may have shipped their oil directly to the Mediterranean for export. Since no inscriptions from these villages are dated later than 610, Tchalenko associated the end of the villages with the Persian wars of 602–30. When the Persian and then Muslim occupation cut off the Mediterranean trade, the villagers lost their economic base, and the villages were gradually abandoned.⁹

8. Tchalenko, *Villages antiques de la Syrie du Nord*, 68–75; H. Kennedy, “The Last Century of Byzantine Syria,” 158; Foss, “The Near Eastern Countryside in Late Antiquity,” 216.

9. Tchalenko, *Villages antiques de la Syrie du Nord*, 426–38; H. Kennedy, “The Last Century of Byzantine Syria,” 159; Foss, “The Near Eastern Countryside in Late Antiquity,” 216–17.

Kennedy disagrees with Tchalenko's conclusion that this region prospered until the Muslim conquest. He notes that dated inscriptions suggest that civic building declined around the end of the first half of the sixth century, while ecclesiastical and especially monastic building continued until the early seventh century. Perhaps the expansion of monasteries and the consolidation of their estates indicate that the monoculture of olives, which had brought such prosperity to the area in the fourth and fifth centuries, was no longer viable by the late sixth century. There is also some evidence for the growth of large secular estates at this time. According to Kennedy, by 600 there were many deserted villages, whose prosperity had vanished with the urban markets on which they had depended, or whose populations had been reduced by plague and invasions and whose remaining productive lands had passed into the hands of religious communities and other large landowners. Only villages sustained by a mixed economy or a much-visited sanctuary survived. Kennedy concluded that the picture of a thriving rural economy based on the export of olives, suddenly extinguished by the arrival of the Arabs, is not supported by the archaeological or historical evidence.¹⁰

As Kennedy noted, Tchalenko's study was based entirely on surface surveys of these villages, on the epigraphic (inscriptional) evidence, and on historical sources, rather than on excavation.¹¹ From 1976 to 1979, J.-P. Sodini and G. Tate conducted the first and only archaeological excavations to date in any of these villages: at Dehes, near the center of the region. Their fully and promptly published excavation report provided the basis for a comprehensive study of the region's villages and economy by Tate.¹² A review of Tate's reconstruction of this rural society and its economy, which differs in fundamental aspects from that proposed by Tchalenko, lies beyond the scope of this discussion.¹³ Instead, I wish to focus on the problem of chronology. Tate suggested that this region reached the peak of its prosperity between about 350 and 550, culminating in about 500. He based his chronology on a combination of dated inscriptions, masonry types, and decoration. According to Tate, these villages experienced the following periods of growth interrupted by stagnation or decline: fairly continuous growth from the first through mid-third centuries; a substantial drop around 250; constant growth from 270 to 550, increasing after 320, much more vigorous from 410 to 480, and reaching the greatest activity between 450 and 480; reduced growth from 480 to 550; then a much different period with the construction of very few houses but several churches until 610.¹⁴ The decline in house construction after the mid-sixth century coincides with the plagues, invasions, earthquakes, and other disasters noted by Kennedy. At the same time, the subdivisions of the houses at Dehes, while indicating a growing population, also suggest increasing impoverishment. Thus, by the time of the Muslim conquest, this region was poor but densely occupied.¹⁵ The evidence from Dehes that was presented by the excavators and synthesized by Tate, seems to support Kennedy's theory that Syria experienced a dramatic decline in the mid-sixth century.

However, my analysis of the excavation report (presented below) indicates that all of the excavated houses at Dehes were constructed in the second half of the sixth to early seventh century—precisely at the time of Kennedy's supposed decline—and were continuously occupied until the ninth or tenth centuries.

10. H. Kennedy, "The Last Century of Byzantine Syria," 160–62.

11. *Ibid.*, 159; Foss, "The Near Eastern Countryside in Late Antiquity," 217.

12. J.-P. Sodini et al., "Déhès (Syrie du Nord), Campagnes I–III (1976–1978), *Recherches sur l'habitat rural*," *Syria* 57 (1980) 1–303; G. Tate, *Les campagnes de la Syrie du Nord du II^e au VII^e siècle, Tome I* (Paris: Geuthner, 1992).

13. For a review and summary, see Foss, "The Near Eastern Countryside in Late Antiquity," 218–23.

14. Tate, *Les campagnes de la Syrie du Nord*, 275–320; Foss, "The Near Eastern Countryside in Late Antiquity," 218–19.

15. See Tate, *Les campagnes de la Syrie du Nord*, 335–42; Foss, "The Near Eastern Countryside in Late Antiquity," 220. The evidence for overcrowding at Dehes contradicts Kennedy's suggestion that the plague caused serious depopulation in this region; see H. Kennedy and Liebeschuetz, "Antioch and the Villages of Northern Syria," 68–69.

In addition, I believe that the accumulated debris in and around the houses reflects conditions of prosperity rather than impoverishment. In my opinion, the dating of Dehes (and the other northern Syrian villages) has been influenced or dictated largely by the historical view that the Persian invasions and/or the Muslim conquest marked the beginning of a decline in prosperity (a decline that Kennedy suggested began almost a century earlier). In other words, the interpretation of the archaeological evidence has been influenced to a large degree by views based on historical sources. Epigraphic evidence (especially dated inscriptions), stylistic considerations (that is, masonry styles), and coins have been used to support these historically-based interpretations. However, the problematic nature of the epigraphic evidence (on which Tchalenko relied heavily for dating) was revealed by the excavations at Dehes. As my analysis of the excavation report indicates, dating on the basis of stylistic considerations and coins can be equally problematic and misleading.

The excavations at Dehes were conducted in a group of houses in the heart of the village, designated as Buildings (*bâtiments*) 101–9. My analysis of the excavation report focuses on the stratigraphic sequence, not on the architectural style and layout of the houses. This means that I only examine houses and courtyards that were sectioned, and in them only the earliest floor levels and those immediately above; the accumulations dating to the eighth to tenth centuries will not be discussed. I cite the excavators' dating of the pottery, which for the most part is accurate (I differ from the excavators in the interpretation of the remains).

House I: Buildings 101, 102, 103

Building 101. A sounding (AII) was made in the southwest corner of the western room of the house. No pottery was found under the earliest floor, which was of beaten earth. Above this floor, at least in its southern part, was a pavement of large flagstones. This pavement yielded two diagnostic sherds of eighth-century date.¹⁶ The excavators therefore concluded that the pavement does not antedate the eighth century. The next floor above, of beaten earth, dates to the eighth to ninth centuries.¹⁷ The excavators placed the construction of the house in the sixth century on the basis of certain architectural details and its sculpture.¹⁸

Building 102. A sounding (AIII) was made down to bedrock along the south side of the wall (originally a row of piers, which was later walled in) that divided this building into two rooms.¹⁹ The bedrock, which is relatively flat, may constitute the original floor of the room. A thin layer of earth (Layer 5) between the bedrock and the earliest floor (Floor III) above it contained pottery described as “proto-Byzantine.” The excavators noted that the blocking of the piers may have caused some disturbances. A cooking pot filled with chicken bones was found crushed against the doorstep.²⁰ Above this was a layer of

16. Sodini et al., “Déhès,” 30; the sherds consisted of a cooking pot fragment dated by the excavators to the eighth century, and an oil lamp fragment of a type (Type 2) that they dated to the 5c–6c (p. 256) but which should be assigned to the seventh to early eighth century; see Magness, *JCC*, 255–58, Oil Lamps Form 4 (“Early Channel-Nozzle Oil Lamps”). The exact provenience of these sherds—below, above, or between the paving stones—is not clear: “Ce dernier [the flagstone pavement] a livré deux tessons caractéristiques” (Sodini et al., “Dehes,” 30). In this analysis of the Dehes excavation report, the “Type” numbers (such as “Type 3 cooking pots” and “Type 2 oil lamps”) follow the excavators’ terminology, unless otherwise noted.

17. Sodini et al., “Déhès,” 30.

18. *Ibid.*, 50.

19. *Ibid.*, 52.

20. *Ibid.*, 54–55. The cooking pot is classified as Type 3a, dated by the excavators to the 5c–6c (*ibid.*, 245–46). Parallels indicate that this type could date to the 6c–7c, or at least could have continued after the sixth century; see for example the similar (though not identical) cooking pots from the seventh-century shipwreck at Yassi Ada in Bass, “The Pottery,” figs. 8–15:P52–P53; 8–16:P60; also see J. W. Hayes, *Excavations at Saraçhane in Istanbul, Volume 2: The Pottery* (Princeton: Princeton University Press, 1992) fig. 55:39, from a deposit of the mid–eighth century.

debris (Layer 4) with another floor of beaten earth above (Floor II). The pottery from this layer (below Floor II) dates to the second half of the seventh century.²¹ On the basis of certain architectural characteristics, especially its appearance, the excavators suggested that this house was constructed at about the same time as Building 104—that is, toward the second half of the fourth century. It was then occupied at least until the eighth to ninth centuries, although debris only began to accumulate above the floors in the sixth and seventh centuries.²²

Building 103. Sounding A XIII was made in the enclosure on the northwest side of the building. The bedrock at the base of the sounding was covered by a layer of debris (Layer 5), above which was a beaten earth floor (Floor IV). This layer of debris contained a great deal of pottery, including a jug of sixth- to seventh-century date. Above this were four more layers of debris and four more floors, which appear to have been disturbed. However, the base of an early channel-nozzle oil lamp from Layer 4 is consistent with this chronology; the excavators dated Layer 4, and Floor III which seals it, to the second half of the seventh century.²³ The latest occupation level here dated to the ninth century.²⁴

Sounding A VIII was made in the south room of Building 103. The earliest layer of fill (Layer 5) overlay quarried bedrock. The beaten earth floor above it (Floor III) was undoubtedly the original floor of the room. Its date is provided by two fragments of an oil lamp of sixth-century date.²⁵ The layer of fill above Floor III (Layer 4) contained a number of potsherds.²⁶ There were also two coins, dating to the reigns of Heraclius, Heraclius Constantine, and Martina, that is, the end of the first quarter of the seventh century.²⁷ These provide a terminus post quem for Floor II, which overlay Layer 4. The excavators concluded that this room was constructed in the sixth century.²⁸ They proposed that Building 102 is the original core or nucleus of this sector and that, during the course of the sixth century, the west portico of Building 102, Building 101, and the south room of Building 103 were constructed.²⁹

House II: Buildings 104, 108

Building 104. A small enclosed court or room was added at the northeast corner of the building at the beginning of the fifth century (Soundings BX–BXI). A fill consisting of stone chips from the cutting of the building stones was covered by the earliest floor in the room, which consisted of a large and irregular stone pavement. To the east and west this pavement was replaced by a layer of earth whose packed surface constituted the rest of the floor in this room (Floor V).³⁰ The occupation level above Floor V yielded a number

21. The pottery included numerous fragments of Late Roman “C” (Phocean Red Slip) Ware bowls, imitations close to Late Roman “C” Form 3, Type 5 cooking pots, and two oil lamps. One of the lamps is close to Type 1a, while the other is a Type 4; Sodini et al., “Déhès,” 55. The excavators dated Type 1a lamps to the 5c–6c, and Type 4 lamps to the Umayyad period (ibid., 256–58). The latter are early channel-nozzle lamps of the 7c–early 8c; see Magness, *JCC*, 256–57, Oil Lamps Form 4B–C.

22. Sodini et al., “Déhès,” 58.

23. Ibid., 86; for the oil lamp see ibid., 85, fig. 104:9. The circular outline of the oil lamp’s base and the decorative motif it contains indicate that it is an early channel-nozzle oil lamp of the 7c–early 8c; see, for example, Magness, *JCC*, 257; Rosenthal and Sivan, *Ancient Lamps*, 131–33.

24. Sodini et al., “Déhès,” 87.

25. Ibid., 90; the oil lamp is Type 3.

26. The sherds included Type 4 and Type 5 cooking pots, two fragments of Late Roman “C” Ware Form 3, and more Type 3 oil lamps; see ibid., 90. For LRC Form 3, dated mainly from the mid–fifth to mid–sixth centuries, see Hayes, *LRP*, 329–38.

27. Sodini et al., “Déhès,” 91.

28. Ibid., 91–92.

29. Ibid., 92.

30. Ibid., 99.

of potsherds and three coins of the fourth century (337–341; 350–355; and 351–354 or 355–361).³¹ The excavators noted that the coins provide a terminus post quem of 351 for the construction of the building, but they disregarded the ceramic evidence. This includes the sixth-century pottery just mentioned, as well as “une petite quantité de matériel de la fin du VI^e siècle et du début du VII^e siècle” found at the level of the layer of stone chips beneath Floor V.³² According to the excavators, a fourth-century date for the building’s construction is confirmed by a comparison between the lintels of the ground floor and second floor doorways. The ground floor lintel is decorated with two classical, pagan altars, while that of the upper floor has a simple cross. Since these blocks do not appear to be reused, the excavators concluded that this building must date to the fourth century, when the region was undergoing Christianization.³³ On the other hand, an examination of the connection between the walls of Buildings 104 and 105 indicates that the former must antedate the latter (that is, Building 104 is earlier), for Building 105 abuts Building 104. Since the construction of Building 105 appears to be dated by a Greek inscription to the years 360–61, the excavators dated Building 104 to a little after the middle of the fourth century, between 351 (because of the coins) and 361.³⁴ The ceramic evidence, which was disregarded by the excavators, provides a terminus post quem in the first half of the seventh century for the construction of Building 104.³⁵ This date is consistent with that of the pottery in the layers immediately above this earliest level.

During its first phase of occupation, the stone pavement was gradually covered by layers of packed earth which yielded the same ceramic types as in the previous level.³⁶ To reconcile this with their proposed mid–fourth-century date for the earliest floor, the excavators proposed that the first phase of occupation lasted for 250 years, until the late sixth century.³⁷ The assignment of the earliest floor level and the layers of packed earth immediately above it to the first half of the seventh century makes a great deal more sense than the prolonged occupation (which is not reflected in a corresponding accumulation of debris) postulated by the excavators. This phase ended when the roof of the building collapsed. The collapse was left in place and Floor III was established just above it. The material from this level dates the collapse of the roof and the repairs that followed it to the mid–seventh century or a little later.³⁸ The packed dirt floors that

31. *Ibid.*, 100–102; the sherds included Type 3b cooking pots, which the excavators dated to the 5c–6c (*ibid.*, 248); a Type 5 cooking pot, dated by the excavators to the 6c and later (*ibid.*); and an imitation of a type of Corinthian oil lamp of 4c date that is not illustrated.

32. *Ibid.*, 102; this material is described on p. 108. The excavators seem to have associated this pottery with later repairs to the building because it did not accord with their proposed mid–fourth-century date of construction: “Peut-être les remaniements décrits, et notamment la tranchée de fondation, mal reparable, du bouchon du passage dans le mur 6, expliquent-ils l’inclusion, au niveau de la couche de déchets de taille, d’une certaine quantité de matériel contemporain du niveau d’utilisation 4” (*ibid.*, 107–8). This material included a coin of Phocas (605–6); a fragment of Late Roman “C” Ware Form 3 (*ibid.*, fig. 128:20), identified as Type B4 by the excavators, but much closer to Types F and H, dated to the 6c; see Hayes, *LRP*, 329–38; and two examples of Late Roman “C” Form 10 (Sodini et al., “Déhès,” fig. 128:21–22), the first of late 6c–early 7c date, and the second of early to mid–7c date; see Hayes, *LRP*, 343–46, Types B and C.

33. Sodini et al., “Déhès,” 102.

34. *Ibid.*, 102–3.

35. The early pottery and fourth-century coins were apparently imported with fills to level this floor, but the terminus post quem should, of course, be based on the latest datable material.

36. This material included Type 2 and Type 3 cooking pots, two examples of Late Roman “C” Ware Form 10, a Type 1a lamp fragment, and a coin of Claudius II (269–270); see Sodini et al., “Déhès,” 103.

37. *Ibid.*

38. The pottery types found in the collapse included Late Roman “C” Ware Form 3 and a Type 2 (early channel-nozzle) oil lamp; see Sodini et al., “Déhès,” 103–7. The excavation of Floor III yielded Type 5 and Type 10 cooking pots, a local imitation of Late Roman “C” Ware Form 10, and Type 4 (early channel-nozzle) oil lamps. Three coins were also found: one is Hellenistic, and the other two are seventh-century *folles*; see *ibid.*, 107.

accumulated above this contained one lead-glazed sherd and two coins (an eighth-century Umayyad coin and one of 685–705). The latest occupation level dates to the ninth century.³⁹

The West Court (of Building 104). The earliest floor, a hard surface of lime and pebbles set in mortar, was established on a sandy fill.⁴⁰ A large jar was set into the floor, buried up to its neck. A complete oil lamp of seventh- to early eighth-century date was found next to the jar.⁴¹ According to the excavators, no debris accumulated on top of this floor between the time it was laid (according to them, in the mid-fourth century) and the time the jar was set into it about two hundred (or more) years later. Instead, the archaeological evidence points to an early-seventh-century date for this floor. After this, debris began to accumulate and the floor level gradually rose. The pottery and coins found in this debris indicate that it accumulated during the course of the seventh century.⁴² This is consistent with an early-seventh-century date for the establishment of the earliest floor, above which this debris accumulated. The latest phase of occupation dated to the eighth century.⁴³

The Northern Approaches to Building 104. The Northeast Enclosure is later than the original portico (porch) in front of the building. The earliest floor, Floor VI, was made of hard-packed dirt. Two distinct layers (*couches*—not surfaces or floors) were revealed in a sounding beneath Floor VI. The lowest, which was made of earth mixed with pebbles, contained Hellenistic pottery and a coin of Constans II (341–46). The excavators understood this as confirming their proposed mid-fourth-century construction date for Building 104. The layer above, which the excavators believed is contemporary with the establishment of the northeast enclosure, contained local pottery and a coin of Honorius (400–402).⁴⁴ They therefore suggested that the enclosure was added to Building 104 in the fifth century. These two layers were sealed by the earliest floor, Floor VI. This floor was covered by layers of debris which began to accumulate in the seventh century.⁴⁵ The excavators accounted for the absence of earlier material on top of Floor VI by suggesting that it remained in use for over a century before debris began to accumulate.⁴⁶ Instead, Floor VI should be dated to the early seventh century; the five diagnostic sherds and two coins found beneath it provide only a rough terminus post quem and were either imported with fills to level the area prior to construction, or are associated with remains that antedate these buildings.

39. *Ibid.*, 108–10.

40. According to the excavators, the only sherds that were found in this level, which were not diagnostic, do not contradict their proposed 4c date for the building; *ibid.*, 111–12.

41. For the Type 2 (early channel-nozzle) oil lamp, see *ibid.*, 115; for the dating of these oil lamps, see n. 16 above.

42. This material included Type 5 cooking pots, Late Roman “C” Ware Forms 3 and 10, and two coins (one of 641 to 647/648 and the other a *follis* of Constantine IV dated between 668–74); *ibid.*, 116.

43. *Ibid.*, 117.

44. *Ibid.*, 117–19; the pottery from these layers is illustrated in fig. 141:1–5.

45. *Ibid.*, 119–23. The first layer of sandy earth above Floor VI (Layer 4) was overlaid by a lightly packed floor (Floor V). The ceramic material it contained included many Type 5 cooking pots, examples of Late Roman “C” Ware Form 10, Type 4 (early channel-nozzle) oil lamps, and two coins (a *follis* of Heraclius, Heraclius Constantine, and Martina [620–21], and one of Constans II [653–54]). This material dates this level to the mid-seventh century. The thick layers of accumulated fills and series of floors above this contained material dating to the eighth to ninth centuries; *ibid.*, 123–28.

46. *Ibid.*, 119: “Le sol VI (niveau—153), très bien damé, est resté en usage très longtemps, plus d’un siècle probablement. . . .” The excavators were at a loss to explain why debris began to accumulate on top of this supposedly fifth-century floor only in the seventh century: “Puis a commencé, pour une raison inconnue, à partir du VII^e siècle, une accumulation très rapide de recharges” (*ibid.*, 119).

House III: Buildings 105, 106, 107

Building 105. According to the excavators, the passage between Buildings 105 and 104 shows the connection between them, and indicates that Building 104 is earlier than 105.⁴⁷ The original north porch of the building had 4 piers. One parapet plaque belonging to this porch was carved with a medallion containing a dated Greek inscription: “[Made] in the year 409. Jesus Christ, son of God, Savior, is the Word.” The year 409 in the calendar of Antioch is 360/361 C.E. The band separating the plaque into two parts bears another inscription in Syriac that is still undeciphered.⁴⁸

Although no soundings were made in Building 105, the excavators distinguished two architectural phases. They dated the first, which includes the core of the building with the north and south porticoes, to after the third quarter of the fourth century.⁴⁹ In the second phase, this core was enlarged. They dated this phase to no earlier than the late fifth century, on the basis of the masonry style and a medallion in the south wall.⁵⁰

The fact that no soundings were made in this building means that there is no archaeological evidence for its date. If, like the other buildings, it was constructed between the mid–sixth to early seventh century, the parapet plaque with the inscription was reused.

Building 107. This is a large rectangular building. Two soundings were made in its western room. Because the sequence in one of the soundings (D IX) appeared to be disturbed, Sounding D VIII provides the basis for this discussion. The earliest floor (Floor III) consisted of a pavement made of large, irregular stone blocks, resting on a layer of debris (Layer 6) directly over bedrock. Above Floor III were two layers of fill (Layers 5 and 4), which contained little pottery but did yield a jug fragment that does not antedate the sixth century. Floor II is of packed earth with two layers of fill (Layers 3 and 2) above. Layer 3 contained little pottery, but Layer 2 yielded pottery types dating to the seventh century. The excavators therefore concluded that Layer 2 was deposited during the second half of the seventh century. The fill of Layer 1 contained eighth-century pottery.⁵¹

Another sounding was made in the eastern room of Building 107. The earliest floor above bedrock and virgin soil (Floor III) was laid on top of a fill (Layer 4). The ceramic material from Layer 4 appears to be homogeneous, and indicates that Floor III does not antedate the sixth century.⁵² Layer 3, which separates Floors II and III, contained pottery of the same date as the previous layer.⁵³ Floor II was very irregular. Layer 2 above it contained pottery and coins of eighth- to ninth-century date.⁵⁴ Because they dated the earliest floor to the sixth century, the excavators could not determine whether occupation here was continuous from the sixth to eighth centuries.⁵⁵ However, the possibility that the earliest floor dates to the early seventh century means that the occupation probably was continuous. According to the excavators, the earliest

47. *Ibid.*, 147.

48. *Ibid.*, 149–153; for the inscription, see p. 153.

49. *Ibid.*, 156.

50. *Ibid.*, 158.

51. *Ibid.*, 165–66.

52. The ceramic material included a Type 5 cooking pot and the base of a Late Roman “C” Ware bowl stamped with a cross, dating to the late 5c to late 6c (see Hayes, *LRP*, 366–67, Motif 73). The two coins from this layer, one of the 4c (335–337) and the other of the 5c (457–474), antedate the latest pottery; see *ibid.*, 166.

53. The pottery included Type 2 and Type 3 cooking pots, an example of Late Roman “C” Ware, and a Type 1a oil lamp; *ibid.*, 168.

54. This material included Type 5 and Type 7 cooking pots, and an Abbasid coin of the second half of the 8c to the early 9c; *ibid.*, 168. For the Type 7 cooking pots, see Magness, “The Dating of the Black Ceramic Bowl.”

55. Sodini et al., “Déhès,” 168.

floor corresponds with the partitioning of this room by the oblique wall, which postdates the original construction of the building. Although the stratigraphy does not provide any indication of the original construction date of the building, the excavators suggested a late third- to early-fourth-century date, based on the molding of the lintel of the southwestern door.⁵⁶ However, the fact that no accumulations antedating the sixth century were found in the soundings in this building, below or above the earliest floor, means that the excavators' proposed construction date is unsupported by the archaeological evidence.

The Excavators' Conclusions

According to the excavators, this complex of three houses presents two important chronological characteristics. First, the houses can be grouped into two main phases on the basis of architectural style. The first phase dates to the fourth century (consisting of the "cores" or "nuclei" of Buildings 102, 103, 104, 105, 107), and the second to the sixth century (Building 101, porches and additions to Building 102, the south annex of 103, the wing of 105, 106, the south wing of the eastern half of 107, 108). The fifth century is not represented, except for some minor repairs to Buildings 104 and 107 (an enclosure was added to 104 at the beginning of the fifth century, and the south porch of 107 was added either in the fifth century or the beginning of the sixth century). The walls of the fourth-century buildings are of double masonry (*appareil double*), while the sixth-century buildings are of simple orthogonal masonry (*appareil orthogonal simple*).⁵⁷ The second characteristic is the lack of correspondence between the construction of the buildings and the pottery found in the occupation levels. Little pottery of the third to fifth centuries was found in the excavations, mostly as residual material in the upper levels. Pottery begins to become abundant in the sixth century, when Late Roman "C" Ware appears. After that, occupation continued at least until the end of the ninth century.⁵⁸

According to the excavators, Dehes enjoyed increasing population and prosperity up to the sixth century. During the seventh century a long decline set in, marked by the cessation of construction and the accumulation of pottery, which reflects a poorer mode of living.⁵⁹ Buildings 102, 103, 104, 105, and 107 were initially constructed during the late third to fourth centuries. The coins, which are abundant between 335 and 379, confirm the growth of the site at this time. There was little construction during the fifth century. During the late fifth to early sixth century, there was another period of construction, represented by the enlargement of Buildings 103 and 105, and the construction of Buildings 101, 106, and 108. No other buildings were constructed after this, but occupation continued without interruption until the beginning of the ninth century or even up to the beginning of the tenth century (Building 101).⁶⁰ The accumulation of layers of debris in each building proves that they were no longer maintained. However, the decline was relative. The abundance of seventh-century coinage (at least until 674) seems to indicate that Dehes (and other villages) enjoyed its most intense economic activity during this period.⁶¹

56. *Ibid.*

57. *Ibid.*, 225–26; these chronological distinctions between masonry styles were also adopted by Tate, *Les campagnes de la Syrie du Nord*, 18–27.

58. Sodini et al., "Déhès," 180, 266. The imported Late Roman Red Wares consist entirely of Late Roman "C" Ware Forms 3 and 10.

59. *Ibid.*, 294.

60. *Ibid.*, 295.

61. *Ibid.*, 301.

My Conclusions

The presence of earlier pottery (most of the residual pottery found in the excavations was Hellenistic and early Roman), coins, and (reused) dated inscriptions attests to occupation in the vicinity of Dehes prior to the sixth century. However, there is no evidence that any of the excavated houses were constructed before the mid-sixth century. The accumulations immediately above the earliest floors in all of these houses contained pottery types dating to the seventh century. The fourth-century (and earlier) material found under the earliest floor in Building 104 either represents fills that were imported to level the area prior to construction or accumulations from an occupation phase in this area that antedates the construction of the house. The accumulations immediately above this earliest floor in Building 104 contained seventh-century ceramic types, including Late Roman "C" Ware Form 10. The collapsed roof that covered these accumulations included an early channel-nozzle oil lamp. A seventh-century date for this house's construction is also indicated by the presence of a seventh-century coin and Late Roman "C" Ware Form 10 in the foundation trench of Wall 6, at the level of the layer of stone building chips. The Type 2 (early channel-nozzle) oil lamp found next to the jar that was set into the earliest floor in the west court of Building 104 also points to a seventh-century date for this occupation level. The Late Roman "C" Ware bowl stamped with a cross, dated from the late fifth to late sixth century, found in the fill below the earliest floor (Floor III) in the eastern room of Building 107 provides a sixth-century terminus post quem for that house's construction. There is no reason that the Greek inscription dated to 360/361 on the parapet plaque from Building 105 could not have been in secondary use. The archaeological evidence thus indicates a mid-sixth- to seventh-century construction date for these houses. The almost complete absence of ceramic material of the third through fifth centuries contradicts the excavators' claim that this was a period when many of the houses were constructed and the settlement flourished. Because of their inherent value, coins continued to circulate for centuries after they were minted. This means that the presence of third- to fifth-century coins does not necessarily reflect a contemporary thriving settlement.⁶² Because pottery breaks easily and was usually in use for short periods, it is a much more reliable chronological indicator than coins. The pottery from Dehes indicates that the village flourished from the seventh to ninth centuries. Furthermore, there is no basis for the excavators' conclusion that the lack of accumulated debris reflects a period of prosperity, while the presence of this debris indicates decline and impoverishment. The implication of this conclusion is that after the Persian invasion or Muslim conquest, the standard of living declined and the villagers allowed garbage to accumulate. I know of no examples of archaeological sites where domestic occupation did not produce accumulations of debris over the course of two to three hundred years, in or at least around houses (with the associated raising of floor levels over time). This is supported by the fact that at Dehes, the excavators uncovered the ground-floor levels of the houses—that is, the parts of the houses that were

62. The potentially misleading nature of coin evidence is reflected in a recent study by Z. Safrai, *The Missing Century* (Leuven: Peeters, 1998). Based on the paucity of fifth-century coins, Safrai concluded that there was a dramatic decline in the size, number, and prosperity of contemporary settlements in Palestine. However, the fact that coins cannot necessarily be directly correlated with periods of prosperity is demonstrated by the forts at 'Ein Boqeq and Upper Zohar, where all of the hundreds of small bronze coins (those that could be identified) antedate their occupation; see my chapter on the *Limes Palaestinae*; also see my "Redating the Forts at Ein Boqeq, Upper Zohar, and Other Sites," 191–99. Similarly, Abbasid coins are rare or unattested at many sites in Palestine with Abbasid occupation. Because they are often found in association with the more common Umayyad coins, many Abbasid ceramics have been misdated to the Umayyad period; see idem, "The Chronology of Capernaum," 482–83. It seems likely to me that, as in Palestine, the third to fifth-century coins found at Dehes remained in circulation into the sixth or seventh centuries or later. For more on this phenomenon, see idem, "The Question of the Synagogue: The Problem of Typology," in A. Avery-Peck and J. Neusner (eds.), *Judaism in Late Antiquity*, part 3/volume 4: *Where We Stand: Issues and Debates in Ancient Judaism—The Special Problem of the Synagogue* (Leiden: Brill, 2001) 27–33.

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used for work space and stock-raising. The living quarters upstairs were presumably kept somewhat cleaner. But in all periods of occupation, debris would have accumulated on top of the floors at the ground-floor level, and certainly in the courtyards of the houses. Thus, the accumulation of this debris does not represent any greater level of “squalor” than any other village site in any other time or place, and it certainly does not reflect impoverishment! Since there is no evidence for discontinuity in the local material culture (and, presumably, in the population) during this village’s occupation, there is no basis for suggesting that the inhabitants radically altered their lifestyle during the seventh century and began to allow debris to accumulate. Even the excavators were at a loss to explain what the inhabitants did with their garbage during the course of the third to fifth centuries. How could it be that the villagers swept all of the ground-floor living spaces so clean over the course of two to three hundred years that virtually no pottery of this period survives? The presence of crosses on some of the houses and on the Late Roman “C” Ware bowl indicates that at least some, if not all of the population of the village was Christian by the sixth century. There is no direct archaeological evidence (such as clearly Muslim symbols or inscriptions, or a mosque) to indicate whether all or part of the population remained Christian after the Muslim conquest.⁶³ The fact that we have no dated inscriptions after 610 is meaningless, since it is clear that at Dehes, at least, the houses were continuously occupied until the ninth or tenth century. Obviously, using dated inscriptions as a basis for tracing the development of these villages can be dangerously inaccurate and misleading. My conclusions mean that the far-reaching historical, social, and economic conclusions drawn by Tate, Foss, and other scholars regarding these villages could be based on a grossly inaccurate chronology. They also mean that the only evidence we have to date from excavations in the northern Syrian villages does not support Kennedy’s theory of a decline in the mid–sixth century.

The excavators’ interpretation of the evidence from Dehes seems to reflect a desire to reconcile the testimony of historical sources with the archaeological evidence. Because of the historical references to various disasters, the idea that northern Syria experienced a decline in the mid–sixth century has become entrenched. To reconcile the evidence for continued occupation of Dehes with this view, the accumulation of debris was interpreted as evidence of “squalor” and “impoverishment.” This view implicitly associates this supposed squalor and impoverishment with the beginning of Muslim occupation. However, the evidence from Dehes cannot be so easily dismissed, because it represents the only excavated and published archaeological evidence for any of the northern Syrian villages.

Antioch

A key point of Kennedy’s hypothesis is that the major coastal cities of Syria–Palestine, including Antioch, declined after the mid–sixth century. In the case of Antioch, he cited the example of the Justinianic street, which was excavated by J. Lassus.⁶⁴ Because none of the pottery and coins from Antioch is provenienced (that is, nowhere in the publications are the contexts of the finds provided), it is impossible to evaluate the date of the excavated remains with precision. Nevertheless, the published archaeological evidence for the Justinianic street contradicts Kennedy’s hypothesis of decline. According to the excavators,

63. A date in the mid–sixth to seventh century for the construction of these houses might find additional, indirect support in the complete or almost complete absence of pig bones at the site. Most of the bones were cattle (*boeuf*), goat, and sheep, with some dog bones. The only pig bones found belonged to two individual female swine, which could have been either pig or wild boar; see Sodini et al., “Déhès,” 301. The almost complete absence of pig bones suggests that the population became Muslim early on, and accords well with the evidence that most of the occupation of these houses postdates the Muslim conquest.

64. H. Kennedy, “The Last Century of Byzantine Syria,” 152–53; see J. Lassus, *Antioch-on-the-Orontes, V: Les portiques d’Antioche* (Princeton: Princeton University Press, 1972).

this colonnaded street was constructed after its predecessor was destroyed in the earthquake of 526.⁶⁵ At some point, the street was invaded by small buildings constructed of reused material, which blocked the road and diverted traffic. Kennedy disagreed with Lassus's assignment of this process to the period following the Muslim conquest, suggesting instead that it occurred during the century between Justinian's work and the arrival of the Muslims.⁶⁶ Thus, according to Kennedy, "long before the arrival or [*sic*] the Arabs, in fact, the city had already lost its classical aspect and amenities and had become a community of narrow winding streets and impoverished buildings amid the ruins of Justinian's attempts to restore a vanished prosperity and glory."⁶⁷

However, as Kennedy has noted elsewhere, the construction of buildings in roads and the dissolution of the classical layout does not necessarily indicate decline and degeneration.⁶⁸ According to Kennedy, the most complex and far-reaching of the changes in urban design during late antiquity and the early Islamic period occurred in street layouts. During this period, the colonnaded classical streets became covered with shops or houses, while narrow roads moved on to what had previously been the line of sidewalks. In some cities, such as Aleppo and Jerusalem, several narrow suqs were built side-by-side on a single colonnaded street. In many residential areas, thoroughfares were converted into narrow, private cul-de-sacs, giving access to the houses on each side.⁶⁹ The design of commercial areas changed in another way. Linear suqs consisting of narrow streets bordered by small shops replaced the open spaces of the classical forum or agora. Large, open markets were moved outside the gates, where livestock and food from the countryside were sold by peasants or Bedouin. Shops offering luxury goods such as fine textiles and spices were located in the suqs around mosques, not in the open markets.⁷⁰ Mosques not only replaced churches as places of worship, but also agoras as the main outdoor meeting-place, and theater as the scene of public meetings and formal political ceremonies.⁷¹ They also took over the function of other public buildings, serving as centers for education in the religious and legal sciences, and as courthouses. According to Kennedy, the transformation of the classical city cannot be understood without appreciating the many different activities that took place in mosques.⁷² The archaeological evidence indicates that these changes occurred over a number of centuries, beginning even before the Muslim conquest.⁷³

One of Kennedy's most important points is

that we should avoid making inappropriate value judgements. The development of the Islamic city is often seen as a process of decay, the abandonment of the high Hippodamian ideals of classical antiquity and the descent into urban squalor. On the contrary, the changes in city planning may, in some cases, have been the result of increased urban and commercial vitality, as in early Islamic Damascus and Aleppo for example. It was rather that the built environment was adapted for different purposes, life-styles and legal customs. The

65. Lassus, *Antioch-on-the-Orontes*, 30.

66. *Ibid.*, 26; H. Kennedy, "The Last Century of Byzantine Syria," 153; H. Kennedy and Liebeschuetz, "Antioch and the Villages of Northern Syria," 65–66.

67. H. Kennedy, "The Last Century of Byzantine Syria," 154. This phenomenon is attested in other cities of Syria–Palestine at this time. It can be seen, for example, at Beth Shean during the seventh and eighth centuries, prior to the destruction of the city by the earthquake of 749; see G. Foerster and Y. Tsafir, "The Beth She'an Excavation Project—City Center (North): Excavations of the Hebrew University Expedition," *Excavations and Surveys in Israel* 11 (1992) 13, 18, 23, 29.

68. H. Kennedy, "From *Polis* to *Madina*: Urban Change in Late Antique and Early Islamic Syria," *Past and Present* 106 (1985) 3–27.

69. *Ibid.*, 11–12.

70. *Ibid.*, 13.

71. *Ibid.*, 15.

72. *Ibid.*, 16.

73. *Ibid.*, 17.

changing aspect of the city was determined by long-term social, economic and cultural forces, not by administrative incompetence or aesthetic insensitivity.⁷⁴

Kennedy attributed these urban changes to demographic decline caused by plagues and invasion.⁷⁵ As this chapter demonstrates, the archaeological evidence does not reflect a demographic decline at this time. He also noted, however, that changes in government patronage, the legal system, and the social structure of cities contributed to this process of transformation.⁷⁶ Commercial activity rather than monumental architecture was the chief source of interest in a Muslim city. This is reflected by the replacement of open colonnaded streets with crowded suqs, which increased the number of retail shops in the city center.⁷⁷ Another cause of change was a fundamental shift in the means of transporting goods. It has been suggested that wheeled transport effectively disappeared in the Middle East between the fourth and eighth centuries.⁷⁸ There are no references to chariots or carts in the early Islamic sources. This is apparently because improved techniques of camel domestication made it cheaper to use pack animals than wheeled carts to transport goods. This not only reduced the high cost of overland transport but had a profound effect on urban planning. Broad, unobstructed streets were necessary for the wheeled transport of goods. Pack animals, on the other hand, require only a simple winding path. Thus, it was no longer necessary to maintain the wide, colonnaded classical streets.⁷⁹ As Kennedy noted, "It should not be imagined that the process of the decay of the classical street plan and monumental buildings necessarily meant that the city was less vital or thriving . . . the intrusion of new building into the open spaces of antiquity after the Islamic conquest may actually indicate increased urban commercial activity and pressure on the land in the city center." The implication of this discussion is that, no matter what their date, the shops and other buildings erected on the colonnaded Justinianic street at Antioch (and on colonnaded streets elsewhere) do not necessarily reflect urban decline and decay.

Although the exact provenience of the coins and pottery is not provided, some useful information can be gleaned from the Antioch excavation report.⁸⁰ First, the presence of post-Justinianic coins below the level of the paved street (which lay between 85.55 and 85.07 m) may indicate a later date for the street. These include a coin of Heraclius and Constantine III (641?) found between 85.07 and 84.77, and a Byzantine "anonymous" coin found at a level of 82.20 m. Lassus, who dismissed these coins as intrusive, also mentioned the presence of late pottery below the street level.⁸¹ While the late pottery and coins could be intrusive, their presence suggests the possibility that the street is post-Justinianic. This issue cannot be resolved on the basis of the published material, which does not provide the exact provenience of these critical finds.

Large quantities of imported Late Roman Red Wares and Coptic pottery of sixth- to seventh-century date were recovered in the excavations.⁸² The fact that all of this pottery was imported from North Africa,

74. Ibid.

75. Ibid., 18.

76. Ibid., 19–21.

77. Ibid., 25.

78. H. Kennedy, "From *Polis* to *Madina*," 26; see R. W. Bulliet, *The Camel and the Wheel* (New York: Columbia University Press, 1990).

79. H. Kennedy, "From *Polis* to *Madina*," 26; Bulliet, *The Camel and the Wheel*, 216–28.

80. The Justinianic street at Antioch is located in the excavators' area 19-M; see Lassus, *Antioch-on-the-Orontes*, 26–29, 148–50.

81. Ibid., 39–40; there are also two coins described as "arabe" but of Constantinian date from below the street level.

82. No other pottery of this period is published from the Antioch excavations. See F. O. Waagé, *Antioch-on-the-Orontes, Volume IV, Part I: Ceramics and Islamic Coins* (Princeton: Princeton University Press, 1948). There are numerous examples of African Red Slip Ware (= ARS) Form 99 (ibid., pl. X:878), dated ca. 510–620 (see Hayes,

Asia Minor, Cyprus, and Egypt hardly suggests a decline at this time and contradicts Kennedy's assertion that "the city was no longer involved in Mediterranean commerce on any large scale."⁸³ In addition, though they are not as numerous as earlier coins, the discovery of substantial numbers of coins dating to the second half of the sixth century and seventh century contradicts Kennedy's claim that the archaeological evidence indicates "that the century before the arrival of the Arabs was one of rapid decline" in Antioch.⁸⁴

Caesarea Maritima

Although Kennedy focused on sites in Syria, he cited Caesarea Maritima⁸⁵ in Israel as an example of an important coastal city that experienced a decline beginning in the mid–sixth century: "According to Byzantine eyewitnesses of the mid–sixth century, Caesarea was greatly decayed at that time and the port almost empty so its prosperity at the time of the Arab conquest may only have been comparative."⁸⁶ Recently excavated and published archaeological evidence from Caesarea contradicts Kennedy's claim. As

LRP, 152–55); ARS Form 100 (Waagé, *Antioch-on-the-Orontes*, pl. X:879), dated late 6c to early 7c (see Hayes, *LRP*, 156); ARS Form 104 (Waagé, *Antioch-on-the-Orontes*, pl. VIII:803–805a–u), dated ca. 530 to 625 (see Hayes, *LRP*, 160–66); ARS Form 105 (Waagé, *Antioch-on-the-Orontes*, pls. VII–VIII:802), dated ca. 530–625 (see Hayes, *LRP*, 166–69); ARS Form 106 (Waagé, *Antioch-on-the-Orontes*, pl. VII:801), dated ca. 600–660+ (see Hayes, *LRP*, 169–71); ARS Form 107 (Waagé, *Antioch-on-the-Orontes*, pl. IX:852), dated ca. 600–650 (see Hayes, *LRP*, 170–71); ARS Form 109 (Waagé, *Antioch-on-the-Orontes*, pl. VIII:805x), dated ca. 580/600 to mid–7c (see Hayes, *LRP*, 170–72); Late Roman "C" Ware Form 10 (Waagé, *Antioch-on-the-Orontes*, pl. XI:949), dated late 6c–early 7c to mid–7c (see Hayes, *LRP*, 343–46), Cypriot Red Slip Ware Form 5 (Waagé, *Antioch-on-the-Orontes*, pl. XI:930u and perhaps 932u), dated mid-to-late 6c (see Hayes, *LRP*, 377); and Cypriot Red Slip Ware Form 9 (Waagé, *Antioch-on-the-Orontes*, pl. XI:930f–p, 970), dated ca. 550 to end of 7c (see Hayes, *LRP*, 378–82). For the Coptic painted ware from Antioch, see Waagé, *Antioch-on-the-Orontes*, 58–59 and fig. 36. For Coptic painted ware in general, see Egloff, *Kellia*; Gempeler, *Elephantine X*. Perhaps some of these "Coptic" bowls are actually from Jerash; see P. M. Watson, "Jerash Bowls: Study of a Provincial Group of Byzantine Decorated Fine Ware," in *Jerash Archaeological Project 1984–1988 II* (Syria 66; Paris: Geuthner, 1989) 223–61; idem, "Ceramic Evidence for Egyptian Links with Northern Jordan in the 6th–8th Centuries AD," in S. Bourke and J.-P. Descoedres (eds.), *Trade, Contact, and the Movement of Peoples in the Eastern Mediterranean: Studies in Honor of J. Basil Hennessy* (Mediterranean Archaeology Supplement 3; Sydney: Mediterranean Archaeology, 1995) 303–20.

83. H. Kennedy, "The Last Century of Byzantine Syria," 155.

84. *Ibid.* For the coins, see D. B. Waagé, *Antioch on-the-Orontes, Volume IV, Part II: Greek, Roman, Byzantine, and Crusaders' Coins* (Princeton: Princeton University Press, 1952) 155–66. There were 176 coins of Justin II (565–78), 90 of Tiberius II (578–82), 128 of Maurice Tiberius (582–602), 34 of Phocas (602–10), two of Tiberius II or Phocas, 55 of Heraclius (610–41), 25 early Byzantine coins (no later than Heraclius), 81 coins of Constans II (641–68) and 8 more imitations of his coins, and one coin of Heraclius or Constans II. Earlier coins through the time of Justinian I were more numerous (634 coins of Anastasius I [491–518], 900 of Justin I [518–27], 14 of Justin I and Justinian I, and 352 of Justinian I [527–65]).

85. I am grateful to Kenneth G. Holum for his assistance with sources of information for this section.

86. H. Kennedy, "The Last Century of Byzantine Syria," 147, though elsewhere he noted that "urban life did continue into the seventh century and Caesarea is the only city where markets are mentioned at the time of the Arab conquest" (*ibid.*, 169 n. 87). Despite the fact that some of the reports reviewed in this section were published before 1985, the only source Kennedy cited for Caesarea was L. I. Levine, *Caesarea under Roman Rule* (Leiden: Brill, 1975). According to Levine, after the fourth century, "Caesarean markets catered to an ever decreasing flow of goods" (*ibid.*, 136), and "the picture of late Byzantine Caesarea is that of a great city with diminishing political and religious influence, diminishing economic life. . . . By the sixth century, according to Procopius and Choricus, Caesarea's port had so deteriorated as to offer little haven for incoming vessels, and its aqueducts had fallen into disrepair. The city became a victim of fire and famine, destroying its prosperity and decimating its population" (*ibid.*, 139). As will be seen, recently excavated and published archaeological evidence from Caesarea contradicts these conclusions.

K. G. Holum has noted, “the scarceness of literary sources mentioning the Byzantine city [of Caesarea] suggested to one authority that it declined in importance after the age of Constantine both politically and economically. Whether literary sources are notably lacking might be debated, but archaeological evidence is becoming more and more abundant for Byzantine Caesarea, and it is this physical evidence, used in combination with the traditional literary sources, that indicates continuity of classical urbanism at Caesarea Maritima until the seventh century.”⁸⁷

In this section, I review selected excavated areas at Caesarea with published remains dating from the mid-sixth to mid-seventh centuries. The 1975–79 excavations directed by E. Netzer of the Hebrew University of Jerusalem revealed the remains of a “Late Byzantine Building” on the coast in the center of the Crusader city, to the north of the Herodian Temple Platform.⁸⁸ The excavators described this as “the largest and most impressively built structure uncovered” in their excavations.⁸⁹ Only a small part of this building was revealed, consisting mainly of two rooms (L127 and Hall L354–359). The walls were constructed of sandstone ashlar, and marble columns were found belonging to the ground floor level in Hall L354–359 and to the upper floor level in L127. Although one reused column was crudely incised with the Hebrew word “shalom,” the presence of several bowls decorated with crosses suggests that the inhabitants were Christian.⁹⁰ Some of the floors were paved with decorated mosaics, while others were plastered or beaten earth.⁹¹ A large quantity of pottery was found in the debris above the floors and in a cistern (L355) below one of the rooms. As D. Adan-Bayewitz noted, these finds presumably date to the last decades of the use of the building, and were subsequently mixed with the debris of the disused structure. Since the small amount of pottery and coins recovered below and within the floors was close in date to the pottery found above them and in the cistern, the building does not appear to have been in use for more than about three decades, from ca. 630 to 660.⁹² There is no need to repeat Adan-Bayewitz’s thorough discussion of the pottery from this building, which includes detailed statistical analyses. What is important are his conclusions regarding the geographical origins of the pottery: eight or nine amphora fragments, four fine ware pieces (Egyptian Red Slip Ware), and one jug seem to have come from Egypt; eight fine ware fragments (Cypriot Red Slip Ware) and three cooking pot fragments apparently came from Cyprus; nine fine ware fragments (Late Roman “C” Ware) came from Asia Minor; and four fine ware pieces (African Red Slip Ware) came from North Africa. In addition, two of the amphora types represented have a suggested east Aegean origin. Adan-Bayewitz’s Amphora Type 2 (Gaza amphoras), which constitutes about one-quarter of the amphoras represented in the corpus, indicates extensive trade with the Gaza region, presumably by sea. His Amphora Types 3 and 11 seem to have been transported from inland. One lamp type may have come from Lebanon, while another type may have been manufactured in the Negev. Adan-Bayewitz concluded that, “the evidence indicates that a significant portion of Caesarea’s trade in the late Byzantine period was sea-borne. This maritime trade, via the port of Caesarea, was apparently an important factor in the economy of the city

87. K. G. Holum, “The End of Classical Urbanism at Caesarea Maritima, Israel,” in R. I. Curtis (ed.), *Studia Pompeiana and Classica in Honor of Wilhelmina F. Jashemski, Vol. II: Classica* (New Rochelle, N.Y.: Caratzas, 1989) 89.

88. For the pottery from this building, see D. Adan-Bayewitz, “The Pottery from the Late Byzantine Building (Stratum 4) and Its Implications,” in L. I. Levine and E. Netzer, *Excavations at Caesarea Maritima 1975, 1976, 1979—Final Report* (Qedem 21; Jerusalem: Hebrew University, 1986) 90–129. For the architecture and stratigraphy, see E. Netzer, “The Main Excavation Area: Description and Stratigraphy,” in Levine and Netzer, *Excavations at Caesarea Maritima*; this building, which was excavated by D. Stacey, is described on pp. 44–48.

89. Adan-Bayewitz, “The Pottery from the Late Byzantine Building,” 90.

90. *Ibid.*, 121 n. 178.

91. Netzer, “The Main Excavation Area,” 44–48.

92. Adan-Bayewitz, “The Pottery from the Late Byzantine Building,” 121.

during the seventh century, both before and after the Moslem conquest of Caesarea in 640 C.E.”⁹³ The Combined Caesarea Expeditions (henceforth referred to as CCE), under the direction of K. G. Holum and A. Raban, have conducted excavations in another part of the “Late Byzantine Building” (the CCE’s Area LL). In addition to huge quantities of amphoras, their excavations have yielded rare gold belt or scabbard attachments dating to the sixth to seventh centuries.⁹⁴ Another small hoard of gold objects of the late sixth or early seventh century was found in the Italian Mission’s excavations in the Byzantine fortress, by the theater. The hoard included jewelry, crosses, and a silver box.⁹⁵

Evidence for activity dating to the mid–sixth to mid–seventh century has been discovered in other areas around Caesarea. For example, the Byzantine city wall, which was apparently constructed in the fifth century, was reinforced at the time of the Muslim siege. This activity is attested in the southern part of the city, where a section of the wall was excavated by M. Peleg and R. Reich.⁹⁶ Architectural elements such as pieces of columns and statuary were brought in to reinforce the wall and block the gates.⁹⁷ In the CCE’s Area V/4, a large quantity of pottery was dumped just above the foundation level of the northern city wall, apparently to stabilize and buttress it against the sand dunes.⁹⁸ This remarkably homogeneous dump, which dates from the sixth to first half of the seventh centuries, was apparently deposited on the eve of the Muslim conquest. The large but unrestorable fragments must have been brought in from elsewhere and deposited at this spot. The freshness of the breaks and generally unworn appearance of the pieces indicate that they were broken shortly before being deposited.⁹⁹ This suggests that although many of the types have a longer range, most should be dated to the late sixth to mid–seventh century, since it is unlikely that they would have remained whole and in use for much longer than that. 137.9 kg of pottery fragments were recovered from this locus (L4061), including many of the same types found in the “Late Byzantine Building.”¹⁰⁰ The overwhelming majority of the fragments belong to storage jars and amphoras (130 kg = 94% of the total by weight and 1,246 sherds = 90% of the total by number). Most of these are southern Palestinian bag-shaped jars, which predominate; Gaza amphoras, which are the second most common type; and northern Palestinian bag-shaped storage jars, which are least numerous.¹⁰¹ Amphora fragments from Cyprus, Asia Minor, and North Africa are also represented. The 130 kg of storage jar and amphora fragments recovered from this one locus attest to the tremendous volume of trade that passed through Caesarea during the course of the sixth century and the first half of the seventh century. Other types represented include imported Late Roman Red Wares from North Africa and Asia Minor, and Cypriot type cooking pots.¹⁰²

The presence of huge quantities of amphoras and storage jars and the proportions of types represented appear to remain consistent at Caesarea over the course of the fifth to mid–seventh centuries. In all of the

93. *Ibid.*, 120.

94. Only a brief report has been published to date on the gold; see M. K. Risser and F. A. Winter, “Gold from the Combined Caesarea Expeditions, 1996,” *Biblical Archaeologist* 59 (1996) 240, with a color photo on the back page. The belt clasp bears a monogram with the Greek name Stephanos. Risser and Winter noted that two governors with this name are known to have served in Caesarea during the sixth century. I was fortunate to visit the excavation on the day that one of the gold pieces was discovered and have seen the amphoras recovered in the CCE excavations.

95. A. Frova et al., *Scavi di Caesarea Maritima* (Rome: ‘L’Erma’ di Bretschneider, 1966) 235–42; A. Frova, “Caesarea,” in Stern (ed.), *NEAEHL*, 274.

96. M. Peleg and R. Reich, “Excavations of a Segment of the Byzantine City Wall of Caesarea Maritima,” *Atiqot* 21 (1992) 137–70.

97. Peleg and Reich, “Excavations of a Segment of the Byzantine City Wall,” 144–45.

98. This deposit comes from L4061; see Magness, “The Pottery from Area V/4,” 133–45.

99. *Ibid.*, 133.

100. *Ibid.*, 134.

101. *Ibid.*, 135.

102. *Ibid.*

excavated areas that have been published to date, southern Palestinian bag-shaped storage jars predominate among the amphora types, Gaza amphoras are the second most common type, and northern Palestinian bag-shaped storage jars are a distant third. This is true of the sixth- to mid-seventh-century assemblage from Area V/4 and of the assemblage of ca. 630–60 from the “Late Byzantine Building” discussed above. The same picture was obtained from the fifth- to mid-sixth-century levels (H3A, H3B, H2A, H1A) and the mid-to-late sixth-century or later level (H4A) of the Hippodrome dump published by J. A. Riley.¹⁰³ Large quantities of the same amphora types were also represented in the foundation trenches of the octagonal building on the Temple Platform. This material has an early-sixth-century terminus ante quem.¹⁰⁴ This evidence suggests that there were no significant changes in trading patterns at Caesarea during the course of the fifth to early seventh centuries. In other words, the fact that the proportions (and, apparently, quantities) of amphora types represented at Caesarea are consistent over time suggests that the maritime trade continued on the same scale.

Evidence from other areas indicates that Caesarea flourished during the mid-sixth to mid-seventh centuries. A luxuriously appointed bath was built in the late sixth or early seventh century among the ancient (and modern) villas to the north of the city.¹⁰⁵ Its small size is characteristic of late antique baths.¹⁰⁶ Several rooms were paved with marble floors in *opus sectile*, and there was a fishpond (*piscina*) which contained live, fresh-water fish for the bathers’ meals. A polychrome geometric mosaic pavement with 120 medallions containing various species of birds surrounded by a border with 24 species of mammals was found outside and to the northeast of the Byzantine city wall. It apparently belonged to another luxury villa.¹⁰⁷

A marble-paved esplanade or courtyard, oriented north-south, was discovered in the city’s east-central sector.¹⁰⁸ It was flanked by the reused, colossal statues of two Roman emperors, one probably of Hadrian and the other of an unidentified figure. These second- to third-century statues were already ancient and headless when they were set up on the esplanade. The esplanade terminated to the north in a triple archway that gave access to a vaulted, rectangular hall. The mosaic floor in this hall, at the base of a broad flight of steps leading to another level, bears a Greek inscription of the late sixth or early seventh century. The text records the erection of parts of the esplanade complex, “the apse, the enclosure, and the stairs,” by Flavius Strategius, “father of the city,” in the time of and by authority of a previously unknown governor (*proconsul*) of Palestine named Flavius Entolius.¹⁰⁹

Another mosaic pavement, discovered in a circular room just to the south of the Crusader city (the Joint Expedition to Caesarea Maritima [= JECM]’s Field C) contained a Greek inscription reading, “May

103. J. A. Riley, “The Pottery from the First Session of Excavation in the Caesarea Hippodrome,” *Bulletin of the American Schools of Oriental Research* 218 (1975) 25–63; on p. 25, Riley noted that there was a lower proportion of Gaza amphoras (his Type 2) in the mid-to-late fifth century level (H1A).

104. See my “Late Roman and Byzantine Pottery,” especially 129–30. I now believe that this material was deposited by the late fifth to early sixth century instead of by the mid-sixth century.

105. See F. L. Horton, Jr., “A Sixth-Century Bath in Caesarea’s Suburbs and the Transformation of Bathing Culture in Late Antiquity,” in A. Raban and K. G. Holum (eds.), *Caesarea Maritima: A Retrospective after Two Millennia* (Leiden: Brill, 1996) 177–89; K. G. Holum et al., *King Herod’s Dream: Caesarea on the Sea* (New York: Norton, 1988) 182–84.

106. See H. Kennedy, “From *Polis* to *Madina*,” 9–10; Horton, “A Sixth-Century Bath in Caesarea’s Suburbs,” 188.

107. See R. Reich, “On Some Byzantine Remains” *Atiqot* (English Series) 17 (1985) 206–12; Holum et al., *King Herod’s Dream*, 181–82.

108. See S. Yeivin, “Excavations at Caesarea Maritima,” *Archaeology* 8 (1955) 122–29; Holum et al., *King Herod’s Dream*, 186–87.

109. Holum, “The End of Classical Urbanism at Caesarea Maritima,” 91; C. M. Lehmann and K. G. Holum, *The Greek and Latin Inscriptions of Casarea Maritima* (Boston: ASOR, 2000) 82–84, Inscription 59.

the years of the most glorious proconsul Andreas, devoted to building, be many!”¹¹⁰ Both the room and the inscription date to the late sixth to early seventh century. The inscription indicates that at this time Andreas, a previously unknown proconsul of Palestine, was still following the classical tradition of sponsoring building projects for public benefit.¹¹¹ Just to the west of this circular room, excavations have revealed the remains of a contemporary structure dubbed the “Archive Building,” whose mosaic floors contain six more Greek inscriptions. Holum has identified this building as the imperial revenue office of Byzantine Caesarea, suggesting that it and the circular room with Andreas’s inscription are part of the civil governor’s palace (*praitorion*).¹¹²

Recent excavations by the CCE have exposed the remains of an octagonal church or martyrion that was erected in the early sixth century on top of the Temple Platform, overlooking the harbor.¹¹³ The apparent depiction of this monument as the central feature in the mosaic floor of the Church of St. Stephen at Umm er-Rsas in Jordan suggests that it continued to function as a church at least into the eighth century, when the mosaic was laid.¹¹⁴

Finally, the numismatic evidence suggests that Caesarea prospered during the mid–sixth to mid–seventh centuries. J. Evans has noted that an economic boom during the sixth and seventh centuries is reflected in the large number of coins found at Caesarea, which represents a far larger number and percentage than any reported site in Palestine.¹¹⁵ Similarly, P. Lampinen has remarked that, “the Byzantine period through 641 constitutes the second period of plentiful coinage at Caesarea.”¹¹⁶ Evans listed a total of 1,435 coins dating between 498 and 640 from various excavations at Caesarea.¹¹⁷ Thus, the published archaeological evidence demonstrates that, contrary to Kennedy’s claim, Caesarea continued to flourish as a commercial and industrial center during the second half of the sixth and first half of the seventh centuries. The large quantities of coins and pottery, especially amphoras and imported fine wares, indicate that a large volume of trade passed through Caesarea at this time. The richly decorated villas outside the walls reflect the opulent lifestyle of those who benefitted from the city’s prosperity.

110. K. G. Holum, “Andreas *philoktistes*: A Proconsul of Byzantine Palestine,” *Israel Exploration Journal* 36 (1986) 61–65.

111. *Ibid.*; for the identification of this building as the *praitorion*, see also R. C. Wiemken and K. G. Holum, “The Joint Expedition to Caesarea Maritima: Eighth Season, 1979,” *Bulletin of the American Schools of Oriental Research* 244 (1981) 27.

112. K. G. Holum, “Inscriptions from the Imperial Revenue Office of Byzantine Caesarea Palaestinae,” in J. H. Humphrey (ed.), *The Roman and Byzantine Near East: Some Recent Archaeological Research* (Journal of Roman Archaeology Supplementary Series 14; Ann Arbor, Mich.: Journal of Roman Archaeology, 1995) 333–45.

113. See K. G. Holum et al., “Preliminary report on the 1989–1990 Seasons,” in Vann, *Caesarea Papers*, 104–8; for the pottery from the foundation trenches, see Magness, “Late Roman and Byzantine Pottery,” 129–41.

114. See J. Magness, review of A. Raban and K. G. Holum (eds.), *Caesarea Maritima: A Retrospective after Two Millennia* (Leiden: Brill, 1996), in *Bulletin of the American Schools of Oriental Research* 308 (1997) 108–9. It is possible that the octagonal church was no longer standing when this mosaic was laid, and that this depiction was drawn from earlier sources. I believe this is unlikely, since the cities in the mosaic are represented by their best-known landmarks. Had the octagonal church been destroyed in the early to mid–seventh century, it would not have been recognized as the identifying landmark of Caesarea by those viewing the mosaic when it was laid in the eighth century.

115. J. DeRose Evans, “Ancient Coins from the Drew Institute of Archaeological Research Excavations of Caesarea Maritima, 1971–1984,” *Biblical Archaeologist* 58 (1995) 162, with references.

116. P. Lampinen, “The Coins, Preliminary Report, 1990,” in Vann, *Caesarea Papers, Straton’s Tower*, 170.

117. Evans, “Ancient Coins,” 164.

Summary

The archaeological evidence contradicts Kennedy's claim that Syria and Palestine suffered a dramatic decline in population and prosperity beginning in the mid-sixth century. In fact, the evidence reviewed here suggests that the opposite is true: apparently, the mid-sixth to mid-seventh century witnessed a tremendous growth of the population as well as of maritime trade. If Kennedy's model of decline is not valid for Syria and northern Palestine, there is no reason to assume it is valid for the Negev and the Negev farms. In other words, there is no evidence to support Haiman's claim that the Negev farms he surveyed must have been established after the Muslim conquest, since the period immediately prior to that was one of decline. Instead, as this chapter and the chapter on the Negev indicate, the archaeological evidence suggests that at least some of those farms were established in the century prior to the Muslim conquest, while some were apparently established afterwards.

CHAPTER 10

Conclusion

Today's archaeologists, like their nineteenth-century predecessors, could not help but be products of their times and national traditions.¹

The types of questions interpreters have asked, as well as their biases and presuppositions, have certainly affected how they have gone about doing their research and ultimately what conclusions they have come to.²

Archaeology is not an exact science because it involves human behavior (in the past and present), and interpretation. Human behavior is unpredictable, and interpretation is often if not always subjective. As I noted at the beginning of this volume, the models proposed by scholars for understanding the Israelite and Muslim conquests/settlement of Palestine have been colored by religious and political biases (whether conscious or not), as well as by changes in interpretive fashions. While I cannot claim that my research is free of biases, I have presented the archaeological evidence independently of historical sources and interpretive models, to allow it to “speak” for itself (although I have reviewed various interpretive models that have been proposed by scholars). This evidence presents a complex and nuanced pattern of settlement that does not fit any of the interpretive models that scholars have proposed to date. My conclusions can be summarized as follows. Palestine and Syria experienced a tremendous growth in population and prosperity between the mid-sixth and mid-seventh centuries. This growth extended from the maritime cities of the Syro-Palestinian coast to the inland villages of Syria (judging at least from Dehes), to the towns and farms of the Negev. During the eighth and ninth centuries, changes occurred. The village of Dehes in northern Syria was intensively occupied without interruption until the ninth or tenth century. Caesarea Maritima continued to flourish, although it contracted in size with the abandonment of many previously occupied areas. Some of the towns, villages, and farms in southern Palestine, including the remote desert regions of the Negev were abandoned (occupation at Mampsis and Avdat seems to have ended some time during the seventh century, and Rehovot was apparently abandoned during the first half of the eighth century). Occupation at others continued, sometimes on a reduced scale, and some new settlements were established. There does not appear to be archaeological evidence for the widespread and violent destructions often associated by scholars with the Sassanid Persian and Muslim conquests of Palestine in the first half of the seventh century. In fact, the small forts (such as those at ‘Ein Boqe and Upper Zohar) and watchtowers that were a characteristic feature of the southern Palestinian landscape disappeared after the seventh century, apparently reflecting a greater real or perceived sense of security among the local population. On the other hand, although occupation continued at some sites with evidence for Christian presence during the

1. N. A. Silberman, *Between Past and Present: Archaeology, Ideology, and Nationalism in the Modern Middle East* (New York: Doubleday, 1990) 248.

2. McNutt, *Reconstructing the Society of Ancient Israel*, 214.

Byzantine period, there is no evidence for continued Christian presence at these or other sites in southern Palestine after the end of the seventh century. Instead, the discovery of mosques and inscriptions at some sites attests to Muslim presence by the eighth to ninth century. This evidence is positive, not negative; in other words, it reflects Muslim presence in at least some of the towns, villages, and farms of southern Palestine by the eighth to ninth centuries but does not indicate whether there were Christians (or Jews) as well.

Many if not most of the towns, villages, and farms discussed in this volume appear to have been abandoned some time between the late eighth to late ninth century. Only a few, such as Nessana and Caesarea, provide evidence for continued occupation into the tenth century. This suggests that the settled areas shrank and the frontier contracted. However, I do not wish to simply transfer the old model of decline and desolation from the Abbasid period to later periods. Perhaps the lack of local ceramic typologies and chronologies for these periods renders their remains invisible, as was the case for the seventh to eighth centuries. Perhaps alternative models of interpretation, such as that proposed for the Ottoman period Cyclades, should be considered.³ Hopefully, future archaeological surveys and excavations and the refinement of the local ceramic typology will shed more light on the complex changes that occurred in the settlement patterns of Palestine during the centuries following the Muslim conquest.

3. Davis, "Contributions to a Mediterranean Rural Archaeology." For a discussion, see my chapter on "Settlement Processes and Patterns of Land Use."

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