

## *Chapter 6*

# Archaeology and the Shasu Nomads: Recent Excavations in the Jabal Hamrat Fidan, Jordan

THOMAS E. LEVY, RUSSELL B. ADAMS, AND ADOLFO MUNIZ

### *Introduction*

Biblical scholars view the Late Bronze Age and Early Iron as the period during which the tribes of Israel settled in Canaan, as described at length in the books of Joshua and Judges in the Hebrew Bible. Neighboring southern Jordan, the geographic area known as “Edom,” witnessed the emergence of the first historically-recorded state or kingdom level of social organization.<sup>1</sup> Thus, when considering the dynamics of social change in Israel/Palestine, scholars must consider developments and historical trajectories in the entire region (including Transjordan). The settlement of the tribes in Canaan has been a contentious issue, stimulating a number of distinctive models that attempt to meld the differing biblical accounts portrayed in these two books, the extrabiblical “historical” data, and archaeology to weave together the most likely model to describe what happened during the Late Bronze–Early Iron Age in the southern Levant. These “settlement” models have been described at length as the “Conquest Model,”<sup>2</sup> the “Peaceful Infiltration Model,”<sup>3</sup> the

1. Ø. S. LaBianca and R. W. Younker, “The Kingdoms of Ammon, Moab and Edom: The Archaeology of Society in Late Bronze/Iron Age Transjordan (ca. 1400–500 BCE),” *The Archaeology of Society in the Holy Land* (ed. T. E. Levy; London: Leicester University Press, 1998) 399–415.

2. W. F. Albright, “The Israelite Conquest of Canaan in the Light of Archaeology,” *BASOR* 74 (1932) 11–23.

3. Y. Aharoni, “New Aspects of the Israelite Occupation in the North,” *Near Eastern Archaeology in the Twentieth Century* (ed. J. A. Sanders; Garden City, N.Y.: Doubleday, 1970) 254–67; A. Alt, “Die Landnahme der Israeliten in Palästina,” *Kleine Schriften* (Leipzig, 1925) 1.89–125.

“Peasant Revolt Model,”<sup>4</sup> the “Symbiosis Model,”<sup>5</sup> and most recently, the “Ethnogenesis Model.”<sup>6</sup> This is not the place to review each of these models in detail, since the scholarly literature is replete with detailed discussions in support and refutation of each position. This essay is an attempt to explore the historical and archaeological data related to the Shasu pastoral nomads—one of the ethnic groups who were contemporaries of early Israel. This discussion has been prompted by the recent excavations of an Iron Age cemetery (Wadi Fidan 40; fig. 1) carried out by the authors, Levy and Adams, in 1997.<sup>7</sup> This paper is dedicated to David Noel Freedman, friend, colleague, and mentor, who has done so much to promote the interplay between archaeology, history, and the Hebrew Bible.

Ethnicity as it relates to the archaeological record is a contentious issue, not only in regard to the Late Bronze Age–Early Iron Age archaeological record of the Levant,<sup>8</sup> but in regard to the world archaeology scene in general.<sup>9</sup> In terms of the southern Levant, the Late Bronze–Early Iron Age interface represents an important period in which Egyptian epigraphic data, biblical narratives, and archaeological data can be used to explore the ethnic tapestry that existed in the region when early Israelite settlement took place. While the Hebrew Bible has been carefully curated and burnished into its present form since the late Iron Age,<sup>10</sup> it is the unchanging literary source that sets the stage for understanding the emergence of Israel in Canaan. While future discoveries of new epigraphic data relating directly to Israel during the Late Bronze–Early Iron Age may provide further details, at present the archaeological record provides the only source of new information that can help scholars understand the background against which early Israel developed. In this paper, we present new information concerning what we believe are the remains of an extensive cemetery in southern Jordan that

4. N. K. Gottwald, *The Tribes of Yahweh: A Sociology of the Religion of Liberated Israel, 1250–1050 B.C.E.* (New York: Orbis, 1979); G. E. Mendenhall, “The Hebrew Conquest of Palestine,” *BA* 25 (1962) 66–87.

5. V. Fritz, “Conquest or Settlement? The Early Iron Age in Palestine,” *BA* 50 (1987) 84–100.

6. T. E. Levy and A. F. C. Holl, “Migrations, Ethnogenesis, and Settlement Dynamics: Israelites in Iron Age Canaan and Shuwa-Arabs in the Chad Basin,” *Journal of Anthropological Archaeology* 21 (2002) 83–118.

7. T. E. Levy, R. B. Adams, and R. Shafiq, “The Jabal Hamrat Fidan Project: Excavations at the Wadi Fidan 40 Cemetery, Jordan (1997),” *Levant* 31 (1999) 293–308.

8. W. G. Dever, “Ceramics, Ethnicity, and the Question of Israel’s Origins,” *BA* 58 (1995) 200–213.

9. S. Jones, *The Archaeology of Ethnicity: Constructing Identities in the Past and Present* (London: Routledge, 1997).

10. R. E. Friedman, *Who Wrote the Bible?* (New York: Summit, 1987).

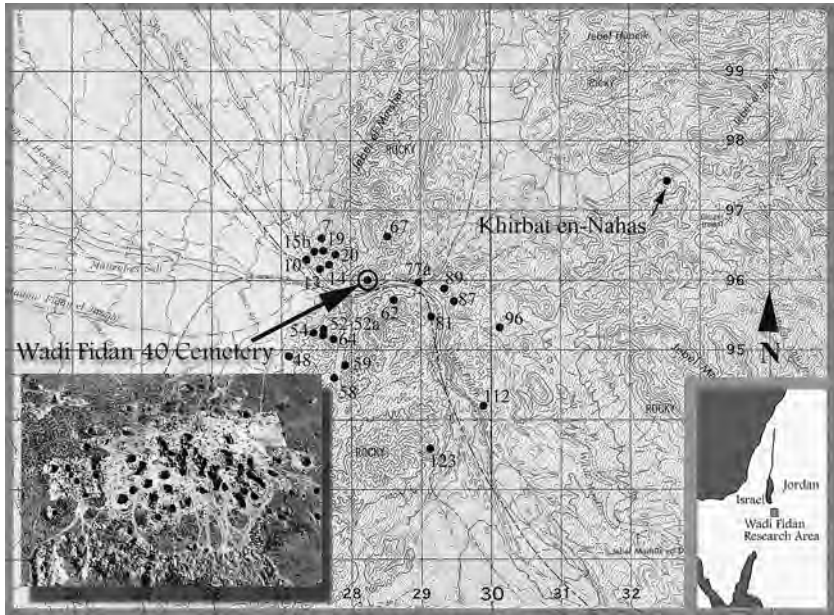


Fig. 1. Map of Research area.

belonged to the Shasu nomads and can be dated to the Early Iron Age II. While the suggestion that this cemetery belonged to the Shasu was made in an earlier paper,<sup>11</sup> here we explore some of the social dimensions reflected in the cemetery excavations. This is particularly germane to the discussion of earliest Israel, for some scholars, such as Anson Rainey, have gone so far as to suggest that “Israel was evidently one group among many Shasu who were moving out of the steppe lands to find their livelihood in areas that would permit them to obtain their own food.”<sup>12</sup> While we do not necessarily subscribe to that view here, it highlights just how important the issue of the Shasu and the mosaic of contemporary south Levantine cultures is for tackling the problem of Israelite settlement in Canaan.

### *Who Were the Shasu?*

The Shasu were a social group of nomads who are known from Egyptian texts, wall reliefs, and monuments dating from the 18th Dynasty (ca. 1550–

11. Levy, Adams, and Shafiq, “The Jabal Hamrat Fidan Project.”

12. A. F. Rainey, “Israel in Merneptah’s Inscription and Reliefs,” *IEJ* 51 (2001) 57–75.

1295 B.C.E.) through the Third Intermediate Period (ca. 1069–747 B.C.E.). To date, the term Shasu is known only from Egyptian sources. Scholars differ in identifying the origin and identity of the Shasu. Even the derivation of the word *Shasu* is uncertain: it is related either to the Egyptian verb ‘to wander’ or to Semitic ‘to plunder’.<sup>13</sup> According to Ward,<sup>14</sup> an Egyptian origin for the word seems more likely. Because the Egyptian sources report the Shasu from vast tracts of the southern Levant, it can be assumed that they were not an ethnic group tied to only one specific region. Rather, the Shasu seem to represent a social class of nomads who reflect an ancient equivalent of the term *Bedouin*, which crosscuts different ethnic groups and relates more to a generic socioeconomic subsistence organization devoted to pastoral nomadism than to ethnicity. Ward presents a detailed summary of all the sources that make reference to the Shasu. With regard to the region of Edom, he states:

Another group of texts places the Shasu in S Transjordan. Short lists of place-names in Nubian temples of Amenhotep III and Ramesses II record six toponyms located in “the land of Shasu.”<sup>15</sup> Those that can be identified are in the Negeb or Edom.<sup>16</sup> One of the six, Seir in Edom, is found elsewhere in connection with the Shasu. A monument of Ramesses II claims that he “has plundered the Shasu-land, captured the mountain of Seir”; a 19th Dynasty model letter mentions “the Shasu-tribes of Edom”; Ramesses III declares that he has “destroyed the Seirites among the tribes of the Shasu.”<sup>17</sup> From the Egyptian viewpoint, then, the Shasu were a prominent part of the Edomite population.<sup>18</sup>

As we get closer to the Late Bronze–Early Iron Age interface and the period of direct concern to our research in the Jabal Hamrat Fidan region in Edom, the links between the Shasu nomads and Edom become clearer. For example, approximately 60 years after Ramesses II, during the 8th year of Merenptah, about 1206 B.C.E., the term “Edom” appears for the first time in *Papyrus Anastasi VI* (lines 51–61):

13. R. Giveon, *Les Bédouins Shosou des documents égyptiens* (Documenta et Monumenta Orientis Antiqui 22; Leiden: Brill, 1971); W. A. Ward, “The Shasu ‘Bedouin’: Notes on a Recent Publication,” *Journal of the Economic and Social History of the Orient* 15 (1972) 35–60; M. Weippert, “Semitische Nomaden des zweiten Jahrtausends: Über die Ššw der ägyptischen Quellen,” *Bib* 55 (1974) 265–80, 427–33.

14. W. A. Ward, “Shasu,” *ABD* 5.1165–67.

15. Giveon, *Les Bédouins Shosou*, docs. 6a, 16a.

16. K. A. Kitchen, “Some New Light on the Asiatic Wars of Ramesses II,” *JEA* 50 (1964) 66–67; Weippert, “Semitische Nomaden,” 270–71.

17. Giveon, *Les Bédouins Shosou*, docs. 25, 37, 38.

18. Ward, “Shasu.”

We have finished with allowing the Shasu clansfolk of Edom to pass the fort of Merenptah that is in Succoth [“Tjeku”], to the pools (brkt) of Pi-Atum of Merenptah (that is/are) in Succoth, to keep them alive and to keep alive their livestock, by the will of Pharaoh, LPH, the good Sun of Egypt, along with names from the other days on which the fort of Merenptah that is in Succoth was passed [by such people . . .].<sup>19</sup>

K. A. Kitchen,<sup>20</sup> in his highly useful summary of Egyptian texts related to Transjordan and Edom in particular, garners useful evidence that links extrabiblical data with biblical texts related to developments around the tenth century B.C.E., the time when the WFD (Wadi Fidan District) 40 Cemetery described below was occupied. Accordingly, *Papyrus Moscow* 127<sup>21</sup> states, “Oh that I could send him [his local oppressor] off to Nahar(in), to fetch the hidden *tmrgn* with whom he had (previously) gone to those of Seir!” Kitchen<sup>22</sup> suggests that the term *tmrgn* is a Semitic loanword for ‘guide, interpreter’ and proposes that *Papyrus Moscow* 127 is close in date to the alleged flight of Hadad, the baby prince of Edom, into 21st-Dynasty Egypt after David’s forces conquered Edom.<sup>23</sup>

### *The Range of Sources for Identifying Ancient Pastoralists in the Levant*

For the southern Levant, perhaps the most important evidence for the existence of pastoral social groups during the Bronze and Iron Ages is found in textual records such as (a) the Hebrew Bible,<sup>24</sup> (b) the Egyptian documents,<sup>25</sup> and (c) Egyptian monuments.<sup>26</sup> Texts provide the historical data for giving the emic evidence of names and places linked to the ancient pastoralists of the Levant. Another source for identifying pastoralism and pastoral nomadism in the archaeological record is archaeozoological remains. There is

19. Text: A. H. Gardiner, *Late-Egyptian Miscellanies*, Vol. 7 (Bibliotheca Aegyptiaca; Brussels: Édition de la Fondation égyptologique Reine Élisabeth, 1937). Translations: e.g., *ANET*; 259 with notes; R. A. Caminos, *Late-Egyptian Miscellanies* (London: Oxford University Press, 1954).

20. K. A. Kitchen, “The Egyptian Evidence on Ancient Jordan,” *Early Edom and Moab: The Beginning of the Iron Age in Southern Jordan* (ed. P. Bienkowski; Sheffield: Collis, 1992) 27.

21. R. A. Caminos, *A Tale of Woe: From a Hieratic Papyrus in the A. S. Pushkin Museum of Fine Arts in Moscow* (Oxford: Griffith Institute, Ashmolean Museum, 1977) 66–69.

22. Kitchen, “Egyptian Evidence on Ancient Jordan,” 27.

23. 1 Kgs 11:14–22.

24. E.g., Amalekites, Kenites, and Midianites.

25. Giveon, *Les Bédouins Shosou*.

26. Cf. R. Giveon, “The Shosu of the Late XXth Dynasty,” *JARCE* 8 (1969–70) 51–53.

a wide range of issues and techniques that archaeozoologists use to reconstruct pastoral-oriented economies.<sup>27</sup> Some of these include the identification of the types of animals exploited, the structure of livestock herds based on the minimum number of individuals (MNI) represented in faunal collections, and the age of animals at death to determine the hunting capabilities of groups, the origins of domestication, and the specific type of livestock exploitation. All of these aspects of archaeozoology play a central part in determining the socioeconomic structure of pastoral and pastoral nomadic communities.

Finally, the material “fingerprint” of pastoral groups—the material residue of these people—provides important and perhaps the most ubiquitous information for identifying these groups in the past. Ethnoarchaeology offers an important source for establishing models for identifying the archaeological variables that can be used to study pastoral-based societies in all their dimensions, such as continuous versus ephemeral occupation, abandonment processes, nomadic grazing routes, and mortuary behavior, among others. Some of the material features include campsites, hearths, and stone arcs representative of tent locations.

### *The Difficulty in Tracing Nomads in the Archaeological Record*

In tackling the problem of identifying and studying pastoralism and pastoral nomadism in the archaeological record, it is essential to conceptualize them in socioeconomic terms. Most anthropologists perceive pastoralism, in all its forms, as rooted in economic activities.<sup>28</sup> For our purposes, we follow Khazanov’s<sup>29</sup> and Bar-Yosef and Khazanov’s<sup>30</sup> definition that states:

pastoralism may be conceived of as a mobile and extensive animal husbandry not necessarily divergent from agriculture. However, from the economic point of view, pure pastoral nomads should be defined as a distinctive type of

27. S. J. M. Davis, *The Archaeology of Animals* (New Haven: Yale University Press, 1987); C. Grigson, “Plough and Pasture in the Early Economy of the Southern Levant,” *The Archaeology of Society in the Holy Land* (ed. T. E. Levy; London: Leicester University Press, 1998) 245–68; B. Hesse and P. Wapnish, *Animal Bone Archeology: From Objectives to Analysis* (Washington, D.C.: Taraxacum, 1985).

28. T. J. Barfield, *The Nomadic Alternative* (Englewood Cliffs, N.J.: Prentice Hall, 1993); O. Bar-Yosef and A. Khazanov (eds.), *Pastoralism in the Levant: Archaeological Materials in Anthropological Perspectives* (Madison, Wisc.: Prehistory Press, 1992); W. Lancaster, *The Rwala Bedouin Today* (2nd ed.; Prospect Heights, Ill.: Waveland, 1997); E. Marx, “Are There Pastoral Nomads in the Middle East?” *Pastoralism in the Levant*, 255–60.

29. A. M. Khazanov, *Nomads and the Outside World* (2nd ed.; Madison, Wisc.: University of Wisconsin Press, 1994).

30. Bar-Yosef and Khazanov, *Pastoralism in the Levant*, 2.

food-producing economy. By this definition, extensive mobile pastoralism is the predominant activity through which the majority of the population is drawn into periodic migrations in order to maintain herds all year round within a system of free-range pastures. Contrary to all other forms of pastoralism, pure pastoral nomadism is characterized by the absence of agriculture even in a supplementary capacity.

This broad economic definition of pastoralism and pastoral nomadism is useful for framing the nature of pastoral-based communities encountered in the archaeological record.

Numerous scholars have grappled with the problem of the visibility of nomadic communities in the archaeological record.<sup>31</sup> Perhaps V. Gordon Childe<sup>32</sup> said it best: “The failure to recognize prehistoric settlement sites as belonging to pure pastoralists is not any proof that such did not exist.” In the deserts of the southern Levant, the visibility of pastoral nomads in the archaeological record has been a point of debate out of which two schools of thought have emerged. On the one hand there are the scholars represented primarily by S. Rosen<sup>33</sup> who believe that the absence of material remains is indicative of no occupation by pastoral-based peoples. An alternative perspective is represented by Finkelstein,<sup>34</sup> who suggests that there “is no possibility of periods of human ‘void’ . . .” in these desert areas. As Finkelstein and Perevolotsky<sup>35</sup> point out, during the nineteenth century there were thousands of Bedouin pastoralists living in the Negev and Sinai, and yet, at the end of the twentieth century, it is difficult to recognize their remains. This problem is highlighted even more by the long history of Bedouin occupation in the Negev, where oral histories document over twelve major tribal wars in the region from the seventeenth through nineteenth centuries.<sup>36</sup> Virtually none of the rich history of these pastoral nomads is preserved in the material record of the Negev today. While there is logic in Rosen’s position, that without hard archaeological facts it must be assumed there was an absence of nomadic occupation in a region, here we are inclined to take a more measured position between Rosen and Finkelstein. Why could not there be a period

31. H. Crawford, “The Mechanics of the Obsidian Trade,” *Antiquity* 52 (1978) 129–32; E. E. Herzfeld, *Archaeological History of Iran* (London: British Academy, 1935).

32. V. G. Childe, *Man Makes Himself* (London: Watts, 1936) 81.

33. S. A. Rosen, “Nomads in Archaeology: A Response to Finkelstein and Perevolotsky,” *BASOR* 287 (1992) 75–85.

34. I. Finkelstein, “Invisible Nomads: A Rejoinder,” *BASOR* 287 (1992) 87–88; I. Finkelstein and A. Perevolotsky, “Processes of Sedentarization and Nomadization in the History of Sinai and the Negev,” *BASOR* 278 (1990) 67.

35. *Ibid.*

36. C. Bailey, “The Negev in the Nineteenth Century: Reconstructing History from Bedouin Oral Traditions,” *Asian and African Studies* 14 (1980) 35–80.

when nomadic communities ceased to exist in a region? It is always dangerous to state emphatically that “there is no possibility” for something to have occurred in the past. Migration, genocide, plagues, and other catastrophes can always decimate a human population. With new research designs and new exploratory methods, new discoveries can always be made that shed light on archaeological problems such as ancient pastoral nomadic communities.

Identifying nomadic communities is notoriously difficult, as highlighted by the debate between I. Finkelstein and S. Rosen, which focuses on the archaeology of western Palestine. A. J. Frendo<sup>37</sup> has provided a very useful summary of some of the reasons it is so difficult to identify nomads in the Near Eastern archaeological record. These include: (1) nomadic remains may be covered by sediment deposition; (2) fences used to construct corrals may have been made of shrubs and other forms of vegetation (rather than stones) that do not survive the ravages of time; (3) natural erosion processes may remove evidence of ephemeral tent camps; (4) cultural formation processes by human activities may remove evidence of nomadic sites; and (5) some archaeologists may not be familiar with the material correlates of nomadic societies and may fail to identify them in the field.

As will be shown here, until recently,<sup>38</sup> no scholar had suggested that there was archaeological evidence for the existence of the Shasu nomads known from historical sources to have occupied ancient Edom. Now, after careful field surveys and systematic excavations in one part of Edom—the Jabal Hamrat Fidan—it is possible to begin an “archaeology of nomads” and build a case for identifying the Shasu in Edom. This identification is rapidly gaining acceptance by researchers studying the Iron Age in southern Jordan.<sup>39</sup>

Some of the archaeological correlates of pastoral nomadic community activities in the desert regions of the Levant include campsites, cemeteries, open-air cult places, rock inscriptions and drawings, corral walls, stone enclosures, hearths, stone arcs, and other features. For the purposes of the Jabal Hamrat Fidan research area, the categories of cemeteries, tent remains, and open-air cultic installations provide some of the most important parallels for isolating material remains belonging to pastoral nomads in the archaeological record of the southern Levant.

Perhaps the earliest Levantine cemeteries that can be linked to nomadic populations are the approximately 21 fields of *Nawamis*, stone-built burial

37. A. J. Frendo, “The Capabilities and Limitations of Ancient Near Eastern Nomadic Archaeology,” *Or* 65 (1996) 1–23.

38. Levy, Adams, and Shafiq, “The Jabal Hamrat Fidan Project.”

39. Cf. P. Bienkowski and E. van der Steen, “Tribes, Trade, and Towns: A New Framework for the Late Iron Age in Southern Jordan and the Negev,” *BASOR* 323 (2001) 21–47.

structures found in the Sinai Desert<sup>40</sup> dating to the end of the Chalcolithic and Early Bronze IA. Conceivably, the most significant indicator that these mortuary sites belonged to a nomadic community is their remote location and isolation from settlement sites. Since the camel was probably not domesticated until sometime during the end of the Late Bronze Age,<sup>41</sup> it is assumed that the nomadic communities that used these mortuary sites were sheep/goat pastoralists. Unlike the vast sand deserts of the Sahara or the Arabian Peninsula, which could be penetrated only with the camel, the deserts of the Levant (Sinai, Negev, southern Jordan) are relatively small geographical areas, not far from the Mediterranean environmental zones, and contain numerous fresh water springs that are readily available for herd animals such as sheep and goats. Thus, the presence of the Early Bronze IA *Nawamis* in the Sinai and earlier Chalcolithic settlements in the northern Negev point to a long history of pastoralism in the deserts of the Levant.<sup>42</sup>

An additional source of nomad mortuary evidence comes from the hundreds of Bedouin Arab cemeteries found throughout the deserts of the southern Levant.<sup>43</sup> These cemeteries provide an important index of the way that cemeteries of nomadic populations change with the degree of sedentarization of the community that uses them. Consider, for example, the northern Negev desert, where thousands of Bedouin were encouraged to settle in permanent villages and towns established in the wake of the Israeli army's withdrawal from the Sinai in 1979, when a number of air bases were constructed in the Negev. Each year following the resettlement of the Bedouin, mortuary monuments changed radically, from the simple, traditional placement of two natural rocks at the head and foot of the interred to well-built brick structures covered with plaster and marble and decorated with finely carved inscriptions with Arabic calligraphy. Thus, cemeteries belonging to nomadic communities may provide a particularly clear index to the degree of sedentarization among those social groups.

### *The Iron Age in Southern Jordan*

The archaeological evidence for occupation in southern Jordan, south of the Wadi Hasa, in the area commonly referred to as Edom, is both sparse and difficult to date. Outside of the few well-known sites (most of which were

40. O. Bar-Yosef et al., "The Orientation of Nawamis Entrances in Southern Sinai: Expressions of Religious Belief and Seasonality?" *TA* 10 (1983) 52–60.

41. Grigson, "Plough and Pasture."

42. T. E. Levy, "The Emergence of Specialized Pastoralism in the Southern Levant," *World Archaeology* 15 (1983) 15–36.

43. E. Marx, "The Tribe as a Unit of Subsistence: Nomadic Pastoralism in the Middle East," *American Anthropologist* 79 (1977) 343–63.

excavated decades ago, such as Busayrah, Tawilan, and Umm el-Biyara), few others of any significance have been excavated in recent years. Over the last few decades, new information about the Iron Age occupation of southern Jordan has come largely from a number of survey projects both on the Edomite and Kerak Plateaus and in the Wadi Arabah: the Wadi al-Hasa Survey,<sup>44</sup> the Kerak Plateau Survey,<sup>45</sup> and the Southern Ghors and Northeast Arabah Survey Project.<sup>46</sup> The results of these surveys have suggested that the region of southern Jordan, far from being devoid of sites, was in fact quite densely settled at various times throughout the Iron Age. Largely as a result of these surveys, there has been considerable debate about the nature of this occupation, its relationship to the preceding Late Bronze Age, and the overall picture of southern Jordan in relationship to other parts of the southern Levant during this formative period. The assertions made by the various surveyors was that the quality of the data from these new sites supported the view that many of them were occupied during both the Late Bronze Age and the Iron Age and that some spanned both periods. The primary basis for almost all of the site dating came from the survey pottery, which has been controversial because there has been concern about whether the data were correctly interpreted.

A limited reconnaissance of several key sites from two of these surveys in 1994 led to trial excavations of the best-preserved sites, Khirbat Dubab and Ash-Shorabat,<sup>47</sup> the results of which cast serious doubt on the overall results of the surveys in correctly identifying the Late Bronze Age–Iron Age transition and the earliest Iron Age of southern Jordan. The findings from the soundings of these two sites suggested limited Iron Age II occupation at Ash-Shorabat, and at Khirbat Dubab no in situ Iron Age remains were found in the trial trenches, but there was evidence of residual Iron Age II sherds from surface contexts in the slope wash from the Khirbat. As a result of the findings of these excavations, Bienkowski has restudied the survey pottery from Khirbat Dubab collected by the Kerak Plateau Survey Project and concluded that in most cases the ceramics from the survey were simply “misidentified and misdated.”<sup>48</sup> In the case of Ash-Shorabat, there seems to have been a

44. B. MacDonald, *The Wadi al-Hasa Archaeological Survey 1979–83: West-Central Jordan* (Waterloo, Ont.: Wilfrid Laurier University Press, 1988).

45. J. M. Miller (ed.), *Archaeological Survey of the Kerak Plateau* (ASOR Archaeological Reports 1; Atlanta: Scholars Press, 1991).

46. B. MacDonald, *The Southern Ghors and Northeast Arabah Archaeological Survey, Vol. 5* (Sheffield Archaeological Monographs 5; Sheffield: Collis, 1992).

47. P. Bienkowski and R. B. Adams, “Soundings at Ash-Shorabat and Khirbat Dubab in the Wadi Hasa, Jordan: The Pottery,” *Levant* 31 (1999) 149–72; P. Bienkowski et al., “Soundings at Ash-Shorabat and Khirbat Dubab in the Wadi Hasa, Jordan: The Stratigraphy,” *Levant* 29 (1997) 41–70.

48. Bienkowski and van der Steen, “Tribes, Trade, and Towns,” 259.

clear misdating of later Iron Age II pottery to Iron I, based largely on the coarse fabrics.

As a result of the recent reexaminations of the data from these surveys, our understanding of the earliest phase of the Iron Age in southern Jordan is scarcely better off than it was previously. Given the unreliable results from more than a decade of survey in the region, it is not yet possible to make a claim for Early Iron Age occupation in most of southern Jordan or to understand the relationship between the emerging Iron Age states of the region in terms of the Late Bronze Age of the southern Levant. As yet no clear continuity between these periods has been adequately documented.

### *Iron Age Occupation in the Faynan Region, Southern Jordan*

The one exception to the above is the evidence now beginning to appear from the Faynan region, the results of which are the best argument yet for the reoccupation of southern Jordan in the Iron Age, following the scant evidence for occupations during the Middle and Late Bronze Ages. As early as 1986, a study of the Iron Age pottery of the Faynan region by Hart and Knauf revised Knauf's earlier dating of the pottery to the "Early Iron Age"<sup>49</sup> and instead suggested three groupings in the Iron Age pottery from this region. The first group was proposed to belong to the seventh-century Edomite phases and included similar types to those already known from the Edomite sites on the plateau. The second group was "Jordanian Negebite" pottery, which was a coarse, handmade pottery with similarities to wares found in the Negev and on the plateau. The third was tentatively called "non-Edomite Iron Age" and included forms and fabrics that were distinctly different from the standard Edomite assemblages known at that time.<sup>50</sup> Hart suggested that the pottery was likely earlier, but later he preferred the term "Early Edomite," since in his view "the shapes are not completely unrelated to Edomite forms, are less precise and difficult to classify."<sup>51</sup>

Since 1998, further details of the Iron Age occupation of the Faynan basin have been revealed by the Wadi Faynan Landscape Survey. In particular, the survey results indicate that the two groups of Iron Age pottery first identified by Hart and Knauf are represented throughout the survey area and that

49. A. Hauptmann, G. Weisberger, and E. A. Knauf, "Archäometallurgische und bergbauarchäologische Untersuchungen im Gebiet von Fenan, Wadi Arabah (Jordanien)," *Der Anschnitt* 37 (1985) 163–95.

50. S. Hart, *The Archaeology of the Land of Edom* (Sydney: Macquarie University Press, 1989) 124–25; S. Hart and E. A. Knauf, "Wadi Feinan Iron Age Pottery," *Newsletter of the Institute of Archaeology and Anthropology, Yarmouk University* 1 (1986) 9–10.

51. Hart, *Archaeology of the Land of Edom*, 125.

in some cases they appear in isolation from each other, suggesting a chronological distinction. This is particularly clear in Wadi Faynan Area 424 and in cuttings made in erosion sections where “non-Edomite Iron Age” pottery is found in conjunction with copper-smelting installations.<sup>52</sup> A detailed analysis of this material is now underway in preparation for the final report, but preliminary work on both the typology and the fabric analysis suggests a clear distinction between these two groups of Iron Age pottery, with the “non-Edomite Iron Age” pottery probably relating to the earliest phases of Iron Age II (that is, the tenth through eighth centuries).

This early phase of Iron Age pottery is supported by finds of similar pottery from other sites in the region, including the excavations at Barqa el-Hetiye<sup>53</sup> and at Khirbet en-Nahas.<sup>54</sup> At Barqa el-Hetiye, excavation of a multiroomed mudbrick/stone building revealed an extensive collection of ceramics very similar to the “non-Edomite Iron Age pottery” from the region of Khirbet Faynan, as well as good examples of painted Midianite wares. Fritz suggested an Iron Age I date for this structure based on similarities of the collared-rim jars (CRJs) to Palestinian pottery repertoires and also on the basis of the presence of the Midianite wares in the assemblage. However, as Bienkowski rightly notes, the CRJs, as shown by Herr,<sup>55</sup> are also at home in Iron Age II, and the evidence for clear chronological dating of Midianite wares has not yet been established.<sup>56</sup> Herr’s well-stratified evidence from Tall al-Umayri supports the continued use of CRJs down to the end of the Iron Age II, and definitive analysis of stratified CRJs from other sites may eventually support his preliminary findings. Indeed, CRJs as well as Midianite wares appear in the Faynan Landscape Survey pottery but have not been interpreted as evidence of Iron Age I occupation. Clearly the most important factor in the Barqa site is the radiocarbon date, which points to a ninth-century B.C.E. date (see table 1).

At Khirbet en-Nahas a small stone and slag-built building produced a smaller sample of ceramics, from excavations within and outside the structure, which Fritz dated to Iron Age II.<sup>57</sup> The radiocarbon evidence from this

52. G. W. Barker et al., “Environment and Land Use in the Wadi Faynan, Southern Jordan: The Third Season of Geoarchaeology and Landscape Archaeology (1998),” *Levant* 31 (1999) 255–92.

53. V. Fritz, “Vorbericht über die Grabungen in Barqa el-Hetiye im Gebiet von Fenan, Wadi el-Araba (Jordanien) 1990,” *ZDPV* 110 (1994) 125–50.

54. V. Fritz, “Ergebnisse einer Sondage in Hirbet en-Nahas, Wadi el-‘Araba (Jordanien),” *ZDPV* 112 (1996) 1–9.

55. L. G. Herr, D. R. Clark, and W. C. Trenchard, “Madaba Plains Project: Excavations at Tall Al-Umayri, 2000,” *Annual of the Department of Antiquities of Jordan* 45 (2001) 237–52.

56. Bienkowski and van der Steen, “Tribes, Trade, and Towns,” 261.

57. Fritz, “Ergebnisse einer Sondage.”

**Table 1. Radiocarbon Dates from Two Iron Age Sites in the Faynan Basin**

Site	Source	Sample Ref.	Radiocarbon Date Age BP	Radiocarbon Date Calibrated BC (1 $\sigma$ )
Barqa el-Hetiye	House 2	HD 13977	2743 $\pm$ 23	905–835
Khirbet en-Nahas	House 1	HD 13978	2704 $\pm$ 52	900–805

building points to a similar date, although the ceramic evidence is less clear, since both “Edomite painted wares” and “non-Edomite Iron Age pottery” occur in this excavation sample (table 1). (This may be a result of problems in the excavation and mixing of phases at this site.)

All of these data were also reinforced by the evidence from the Jabal Hamrat Fidan Archaeological Survey in 1998,<sup>58</sup> where evidence of numerous Iron Age sites throughout the wadi yielded both the later “Edomite Iron Age” and the “non-Edomite Iron Age” pottery, which matched the results from the wider Faynan basin. Many of the Iron Age sites found in the survey also contained evidence nearby for small-scale copper smelting installations, although one site known as Nelson Glueck’s “Khirbat Hamra Ifdan”<sup>59</sup> may well have been a strategic post guarding the southern approach to Khirbat en-Nahas.

The results of the 1998 intensive, systematic, pedestrian archaeological survey carried out along the Wadi Fidan were instrumental in demonstrating the nomadic nature of the local settlement pattern along this important drainage.<sup>60</sup> A total of 24 Iron Age sites were found along the 4.5 km long ( $\times$  1 km wide) survey area. There is a lack of developed settlement sites in this region, which represents the “gateway” to the copper-ore-rich Faynan district. Instead, the sites are dominated by cemeteries (N = 7, including WFD 40), small-scale metal processing sites without building structures (N = 4), a large campsite, and other smaller sites. This is not to say that Iron Age settlement sites do not exist in the Faynan district. Two of the most famous Iron

58. T. E. Levy et al., “Early Metallurgy, Interaction, and Social Change: The Jabal Hamrat Fidan (Jordan) Research Design and 1998 Archaeological Survey: Preliminary Report,” *Annual of the Department of Antiquities of Jordan* 45 (2001) 1–31.

59. R. B. Adams, “Romancing the Stones: New Light on Glueck’s Survey of Eastern Palestine as a Result of Recent Work by the Wadi Fidan Project,” in *Early Edom and Moab: The Beginning of the Iron Age in Southern Jordan* (ed. P. Bienkowski; Sheffield Archaeological Monographs 7; Sheffield: Collis, 1992) 177–86.

60. Levy et al., “Early Metallurgy.”

Age sites in the region, Khirbat en-Nahas<sup>61</sup> and Khirbat Faynan (biblical Punon),<sup>62</sup> provide evidence of extensive building complexes that no doubt indicate permanent settlement. However, WFD 40, with over 3,500 well-built mortuary monuments, is isolated and relatively far from these large Iron Age settlement and industrial sites. The dichotomy between the Wadi Fidan “nomadic” Iron Age settlement pattern and the patterns that characterize the main Faynan Valley and the Wadi Ghuwayb where Khirbat en-Nahas is situated are characteristic of the relationship between settled communities and nomads known from the Near Eastern ethnographic record.<sup>63</sup>

By far the largest Iron Age site in the survey area of the Wadi Fidan was the Wadi Fidan 40 Cemetery. This site has been known for many years, but the dating had been in question until the 1997 excavations of the Jabal Hamrat Fidan Project, which successfully dated the site to the early phases of Iron Age II. The results of the excavation provide the first tentative archaeological evidence for the Shasu nomads, known from the textual records.

***The Wadi Fidan 40 Cemetery:  
Preliminary Spatial Analysis of an Iron Age Nomad Cemetery***

The Wadi Fidan 40 Cemetery is located on a Pleistocene terrace along the north bank of the Wadi Fidan some 20 m above the present drainage channel. Based on the on-site survey of the grave structures visible on the site surface, the cemetery is estimated to extend over an area of ca. 17,600 m<sup>2</sup>. The surface is densely packed with the remains of circular grave structures (ca. 5 structures : 25 m<sup>2</sup>), making it possible to estimate the total number of graves represented in the cemetery at about 3,500 mortuary structures. The cemetery was first identified and sampled by R. B. Adams in 1989<sup>64</sup> and was initially thought to be linked to the Wadi Fidan 4 Early Bronze Age I village. However, the first systematic excavations at the site conducted by T. E. Levy and Adams in 1997 exposed an area of approximately 1,505.65 m<sup>2</sup>, gained a representative sample of the cemetery site, and showed conclusively that the cemetery dates to the Iron Age, rather than the Early Bronze Age.

The discovery of iron ornaments and a radiocarbon determination from one of the best-preserved tombs date the cemetery to the Iron Age. The results of this analysis undertaken by Beta Analytic, Inc., come from Wadi

61. T. E. Levy et al., “Nahas (Khirbet en-),” *Archaeological Encyclopedia of the Holy Land* (ed. A. Negev and S. Gibson; New York: Continuum, 2001) 361; Fritz, “Ergebnisse einer Sondage.”

62. Barker et al., “Environment and Land Use.”

63. Khazanov, *Nomads and the Outside World*; Levy and Holl, “Migrations, Ethnogenesis.”

64. Adams, “Romancing the Stones.”

**Table 2. Results of Radiometric Dating of a Fruit Sample from Grave 92**

Sample Number	Measured C14 Age	C13/C12 Ratio	Conventional C14	Calibrated results intercept of 2 sigma 95% probability	Calibrated radio-carbon age with calibration curve	1 sigma 68% probability
Beta-111366	2800 ± 70 BP	-25.0 0/00	2800 ± 70 BP	cal BC 1130–815	Cal BC 925	cal BC 1015–845

Fidan 40 Cemetery, Area A, Grave 92, Locus 531, Basket: 2133 + 2157 (table 2). The material consisted of pomegranate seeds that were pretreated using acid/alkali/acid.

More detailed descriptions of the grave structures, mortuary practices, burial position, grave goods, preservation, and skeletal remains can be found in our preliminary report.<sup>65</sup> For our purposes here, we wish to present a short overview of the character of the cemetery and preliminary implications for understanding the social organization reflected in the mortuary remains. Very briefly, each burial monument was constructed for one individual and consists of a circular pit that was dug approximately 1 m below the surface. At the bottom of the pit, a stone-lined cist grave was prepared for the deceased, the dimensions of which were made according to the size of the deceased. The cist walls and capstones were all made of hewn stones. Once the capstones were placed over the deceased (who, depending on gender, was usually buried with wooden bowls, beads, iron and copper jewelry, pendants, etc.), a thin layer of pise was smeared over the capstones to seal the burial. The hole containing the cist was then filled with sediment, and a ring or circle of wadi cobbles (usually dolorite) was placed around the edge of the hole to mark the grave. Sometimes a series of flat wadi cobbles were used to make a paved surface inside this circular grave marker. The diameter of these grave circles varies from 80–99 cm to over 2.60 m. It is the preponderance of these grave circles on the site surface that allows us to make the remarkable estimates for the number of individuals possibly buried in the cemetery.

The broad excavation exposure revealed a total of 62 grave structures. As seen in the plan illustrating the layout of these graves (fig. 2), it is possible to detect four clusters of grave circles in the excavation area. Determining tight clusters of graves based on rigorous analytical methods is beyond the scope of this study. To determine the grave clusters accurately, a detailed GIS analysis of the cemetery is needed, using spatial analytical techniques based

65. Levy, Adams, and Shafiq, "The Jabal Hamrat Fidan Project."

on variations of Nearest Neighbor Analysis and other tools for mapping density.<sup>66</sup> For this preliminary study, we simply work with the visual impression made by the grave circles in association with preliminary plots of the grave goods found in the cemetery. To ensure that all small burial goods, human remains, animal bones, and other small objects were retrieved from the cemetery, all sediment from each grave was sieved through 3 and 5 mm mesh dry-sieves. If small beads were found, excavation strategies were changed and the smaller mesh was used. In what follows, a brief description of the spatial distribution of the grave goods found in the cemetery is given in an effort to determine grave clustering and the implications for understanding the social organization and nature of the society that used the cemetery.

### *The Wadi Fidan District 40 Bead Assemblage*

The most ubiquitous grave offerings found in the WFD 40 Cemetery are beads. A large assemblage totaling about 2,004 beads that were strung in necklaces, bracelets, and anklets were found in the excavated graves.<sup>67</sup> The beads are made from a wide variety of minerals as well as bone, coral, shell, and, very occasionally, glass. The primary minerals used included (in order by number found) onyx, carnelian, limestone, Amazon stone, Egyptian alabaster (calcite), chalk, agate, apatite, amber, marble, quartz, jasper, sandstone, chrysoprase, feldspar, and haematite, all of which can be found locally in the Faynan region. However, it should be noted that the one peculiarity of the mineral assemblage used for the beads is the nearly complete lack of copper minerals, which are so readily available in the Faynan area. With the exception of two chrysoprase beads, no other copper minerals were found. This is in contrast to other periods of occupation in the region, when copper minerals were used extensively. During the Early Bronze Age, the village at Wadi Fidan 4 on the opposite bank of the Wadi Fidan saw the use of copper ore extensively for the production of copper beads, and during the Pre-Pottery Neolithic, copper minerals were used for beads as well as pigments at the nearby village at Wadi Fidan 1. Both of these examples indicate that settled peoples of the region made use of these copper minerals, in contrast to the Iron Age populations of the Wadi Fidan 40 Cemetery, raising the possibility that this population was not interested in the wealth of copper ores available nearby.

There is a wide variety of shapes and sizes of beads represented in the assemblage, attesting to a varied industry of production techniques used in

66. A. Mitchell, *The ESRI Guide to GIS Analysis—Volume 1: Geographic Patterns & Relationships* (Redlands: ESRI, 1999).

67. L. Harris, *The Social Archaeology of Beads: Evidence from the Wadi Fidan 40 Cemetery, Southern Jordan* (B.A. thesis, University of Bristol, 2000).



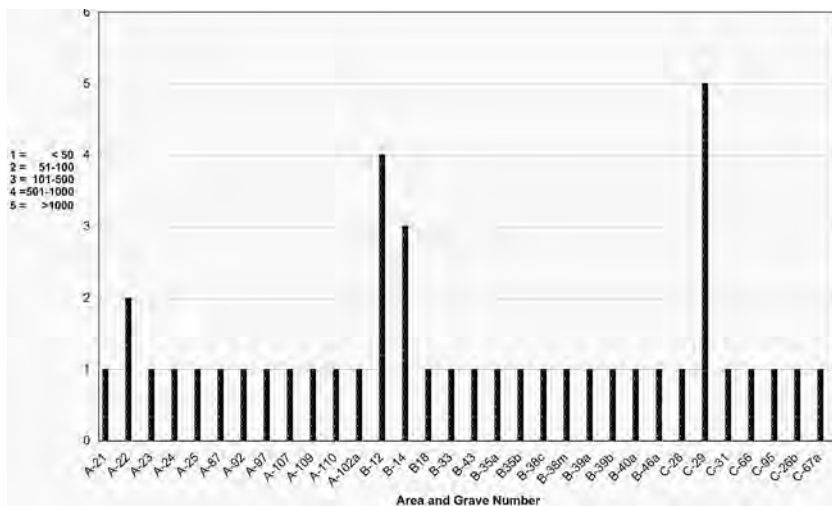


Fig. 3. Histogram showing number of beads by area and grave (in increments of < 50, 51–100, 101–500, 501–1000, and > 1000).

their shaping and manufacture. The technique of shaping no doubt varied according to the materials being used, because the bone, shell, coral, limestone, and Amazon stone would have been quite easily shaped due to their softness, whereas other minerals such as quartz and carnelian were likely more difficult to work due to their relative hardness. In general, different minerals and materials seem to have been formed in specific shapes, perhaps reflecting the ease (or not) of working the material.

By far the most interesting aspect of the bead assemblage was the presence of a small number of glass beads. Altogether there were 14 glass beads from graves 12, 14, 29, and 92. This small sample was composed of a variety of colors from green to green-blue, yellow, black, and white, and were primarily small, disk-shaped beads, although the largest two were spherical. The largest bead was actually composite, having inclusions of bone as raised relief. The origin of these glass beads among what is assumed to be a mobile population is uncertain, but the beads are similar to many Egyptian beads of the early first millennium, and an Egyptian origin cannot be ruled out.

### *The Distribution of Beads*

There were 32 graves (or 51.6 %) that were found with beads (fig. 2). In this preliminary study, we are not presenting a detailed spatial analysis of the beads based on their material composition. At a later time, this will be an important source of data for identifying variation among the graves. In this very

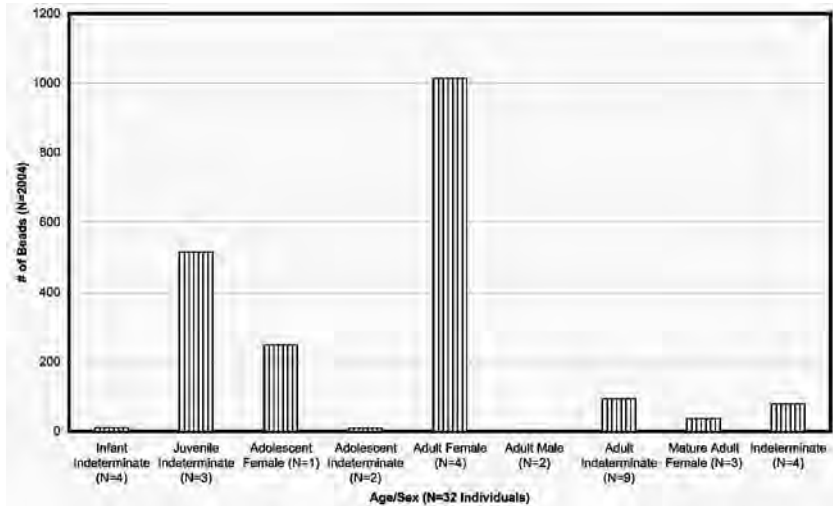


Fig. 4. Histogram: beads by age and sex (infant—indeterminate age, juvenile—indeterminate age, adolescent female, adolescent—indeterminate, adult female, adult male, adult indeterminate, adult—mature, adult—mature indeterminate).

preliminary study, we are focusing on the numerical distribution of beads in the cemetery. Figure 3 illustrates the distribution of beads by grave and excavation area. There seems little doubt that these beads were part of necklaces, most of which probably belonged to women, that were buried with the deceased. Figure 4 shows the distribution of beads by age and sex found in the WFD 40 Cemetery, the vast majority of which are associated with four adult females, three mature adult females, and one adolescent female. Unsexed juveniles ( $N = 3$ ) and indeterminate adults ( $N = 9$ ) make up the next categories with large numbers of beads. It is likely that, if DNA studies are carried out on the human remains associated with these graves, they also will turn out to be females. In fact, only two adult males were found with beads ( $N = 3$  beads), making it highly probable that beads are a good marker for female gender in the WFD 40 archaeological record. Accordingly, the distribution of beads was divided into the following categories:  $< 50$ ,  $51-100$ ,  $101-500$ ,  $501-1000$ , and  $>1000$ . Only 4 graves included more than 50 beads [Graves 12 ( $N = 511$ ), 14 ( $N = 249$ ), 22 ( $N = 68$ ), and 29 ( $N = 1,008$ )]. The remaining 28 graves had an average of 6 beads per grave with a range of between 1 and 45 beads. Of the 4 graves with more than 50 beads, 2 have been definitively identified as female. The remaining 2 graves contained skeletons whose sex cannot be identified but who were most likely female, based on evidence presented here. Of the 28 graves with less than 50

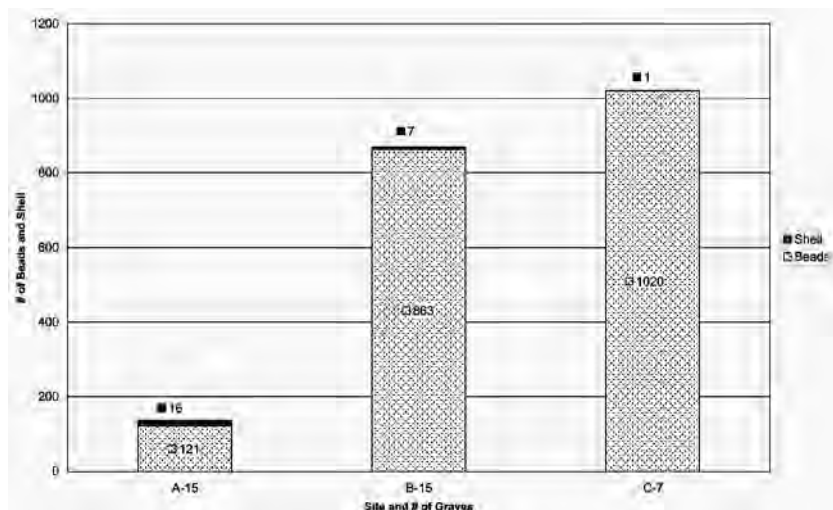


Fig. 5. Histogram of bead materials by frequency.

beads, 2 were identified as male and 6 as female, 16 were unidentified, and 4 were graves that did not contain human remains.

As grave goods, what do the beads represent? How many beads are necessary to assume that a necklace was included as a grave offering? While it is tempting to assume that each grave containing beads implies that the deceased was buried with a necklace, we can only be sure that 4 graves contain more than 50 beads. These may be the only graves that can be interpreted as containing necklaces. How should we define the remaining graves with less than 50 beads? The remaining graves can be divided into two meaningful categories: 25 graves include less than 10 beads, and 3 graves were found with 28 to 45 beads. We know that Bedouin (men, women, children) often wear several beads on a string around their necks or wrists as a kind of amulet.<sup>68</sup> One group of beads ( $N = 23$ ) was found in Grave 14 on a string resting on one of the arms of the deceased, suggesting that it was a bracelet. Thus, here we assume that graves with  $>100$  beads represent the presence of necklaces, and those with  $<100$  beads indicate amulets that may have been worn as a necklace/amulet or bracelet. Can the beads be used to infer social prestige? Most of the raw materials used in the manufacture of the WFD 40

68. A. Musil, *Manners and Customs of the Rwala Bedouin* (New York: American Geographical Society, 1927); S. Weir, *The Bedouin: Aspects of the Material Culture of the Bedouin of Jordan* (London: World of Islam Festival, 1976).

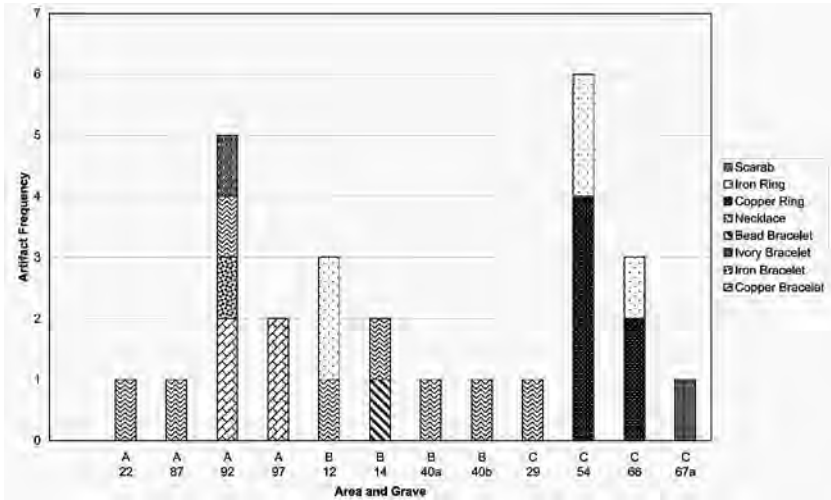


Fig. 6. Histogram: ornamentation (bracelets, necklaces, rings, scarabs) by excavation area and grave.

beads (quartz, carnelian, onyx and other agates, amazonite and other materials) are from rock sources that are locally available. The necklace buried with Grave 92 (fig. 8)<sup>69</sup> included a Middle Bronze IIB “Hyksos” scarab, which we interpret as an heirloom. However, the lack of beads made from precious metals or minerals argues against using beads to infer the kind of complex social organization associated with urban societies. Thus, the social interpretation of the beads cannot be separated from a multiview study of the entire material culture assemblage represented in the cemetery. Accordingly, there is little architectural variation within the cemetery (except on the basis of the age of the deceased), and at this time we have not found evidence of a rigid social hierarchy represented by the mortuary remains. However, as seen in fig. 5, the fact that the majority of the bead assemblage was found in graves from the Area A and B clusters of burials suggests that individuals from these clusters may be women with relatively more prestige than those found in Area C in the WFD 40 Cemetery. However, this assumed “ranking” in prestige is impressionistic and the differences between Areas A and B so minor that we assume some kind of “egalitarian” principle was at work in the burial tradition at WFD 40.

69. Levy, Adams, and Shafiq, “The Jabal Hamrat Fidan Project,” 299; A. Rowe, *A Catalogue of Egyptian Scarabs, Scaraboids and Amulets in the Palestine Archaeology Museum* (Cairo: Imprimerie de Institut Francais, 1936) 331.

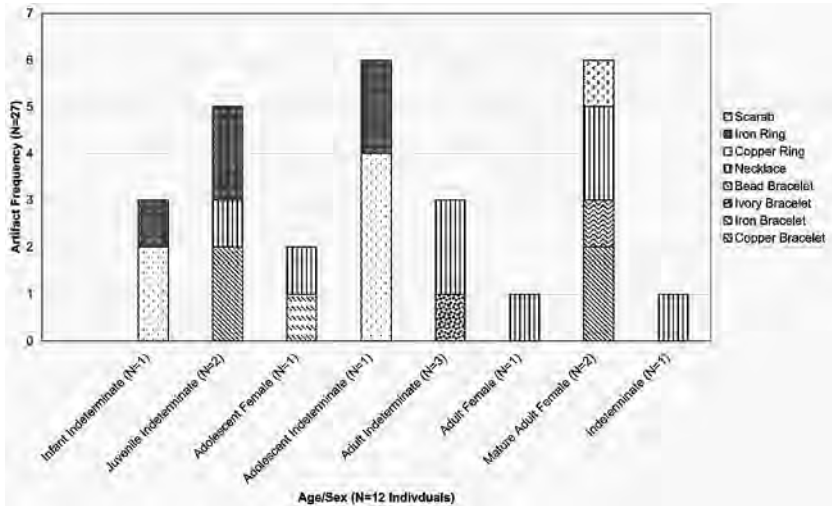


Fig. 7. Histogram: ornamentation (bracelets, necklaces, rings, scarabs) by age and sex.

### *The Distribution of Ornaments*

For the purpose of this preliminary study, ornamentation refers to: metal rings and bracelets (made from both copper and iron) and necklaces or bracelets from beads already discussed above. Metal jewelry (bracelets and rings) may be the most unambiguous evidence of “wealth” in the WFD 40 Cemetery. Here we discuss the metal ornaments. Four graves were found with bracelets (for arms or legs) and 3 with metal finger rings (fig. 2). It is interesting that no grave contained both a bracelet and a ring (see fig. 6, which illustrates the distribution of ornamentation by grave and excavation area). If prestige can be identified based on variation in the number of grave goods associated with a burial,<sup>70</sup> we assume that the burials with metal artifacts represent the highest-ranking individuals in the cemetery excavation, simply because the production of metal and metal objects was more labor-intensive and “knowledge-laden” than bead production. According, there is no ques-

70. L. R. Binford, “Mortuary Practices: Their Study and Potential,” in *Approaches to the Social Dimensions of Mortuary Practices* (ed. J. A. Brown; Memoirs of the Society for American Archaeology 25; Washington, D.C.: The Society for American Archaeology, 1971) 6–29; R. Chapman, I. Kinnes, and K. Randsborg, *The Archaeology of Death* (London: Cambridge University Press, 1981); N. A. Rothschild, “Mortuary Behaviour and Social Organisation at Indian Knoll and Dickson Mounds,” *American Antiquity* 44 (1979) 658–79.



Fig. 8. Overview of Grave 93.

tion that Grave 92 (fig. 8) represents the highest-ranking individual (a mature female) excavated in the cemetery. The woman was buried with 3 bracelets (2 copper, 1 iron), 28 beads (3 were on a string), and a scarab, a garland of 5 pomegranates, a large wooden bowl fragment, and a spindle whorl. However, ascribing the term “highest ranking” is purely relative here. If we examine the distribution of metal ornaments and scarabs by age and sex (fig. 7), as we did the distribution of beads, it is clear that ornamentation represents a female burial tradition at the WFD 40 Cemetery rather than a male one. In fact, out of a total of 80 human burials, only 5 could definitely be identified as male. Of the 3 adult male graves, Grave 25 had 2 beads and Grave 31 had 1 bead. This conforms to contemporary Bedouin male practices, where an individual male will often wear a single bead on a string that functions as a charm or

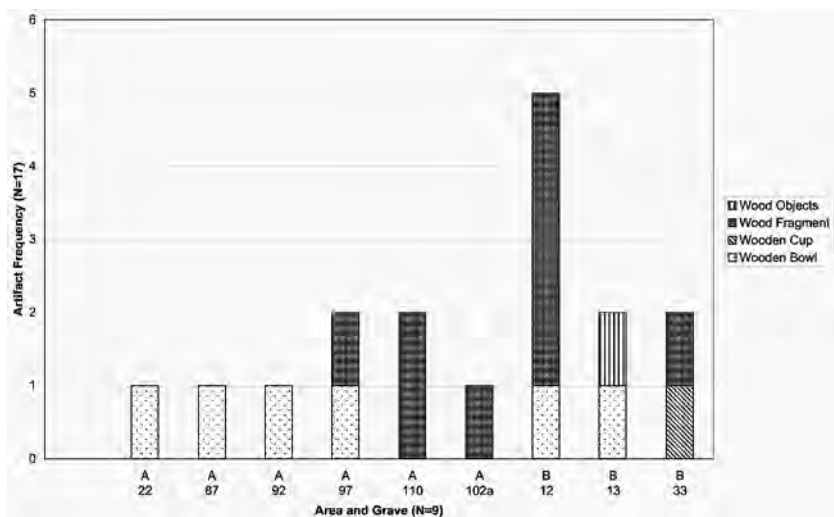


Fig. 9. Histogram: wood artifacts (indeterminate objects, bowls, cups) by area and grave.

totem to protect him. As noted above, the lack of evidence for clearly identifiable preciousities in the total cemetery excavation sample (N = 62 graves and 80 individuals) argues against using the metal ornaments (made of locally available copper and simple iron artifacts) as strict indicators or highly significant symbols of wealth.

### *The Distribution of Wood Artifacts*

One of the biggest surprises in the WFD 40 Cemetery excavations was the complete absence of pottery vessels in the grave assemblage. While little systematic research has been done on Bedouin burial practices,<sup>71</sup> ethnographic collections<sup>72</sup> demonstrate the importance of “unbreakable” wooden vessels that could be easily packed and would survive camel and donkey journeys across the desert. The assumption made here is that the inclusion of wooden artifacts (mostly bowls and cups) is a material correlate of a nomadic community interred in the WFD 40 Cemetery. This is not to say that the

71. Cf. J. Ben-David, *Ja'baliya: A Bedouin Tribe in the Shadow of the Monastery* (Jerusalem: Cana, 1981) [Hebrew]; Lancaster, *The Rwala Bedouin Today*; A. Marx, *Bedouin of the Negev* (Manchester: Manchester University Press, 1967); Musil, *Manners and Customs of the Rwala Bedouin*.

72. Levy, personal observation; Negev Museum and Joe Alon Bedouin Museum ethnographic collections.

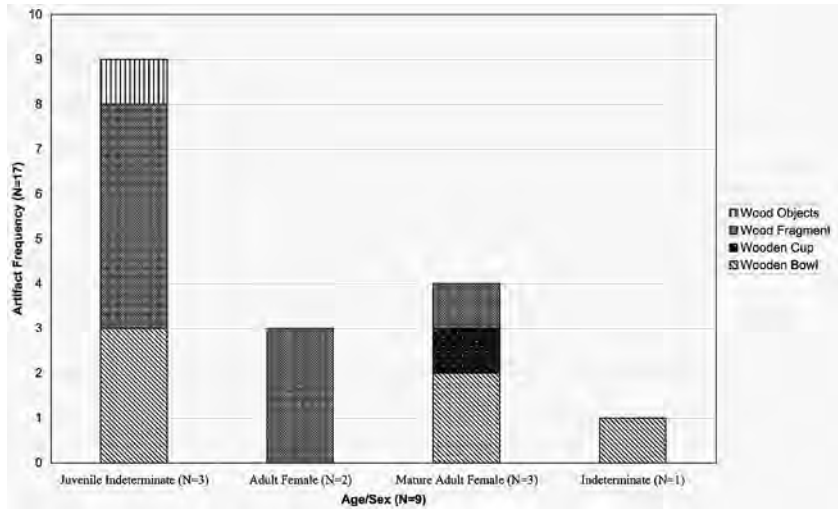


Fig. 10. Histogram: wood artifacts (bowls, fragments, indeterminate objects) by age and sex.

Iron Age nomads who were buried in the cemetery did not use pottery as part of their material culture. Frank Hole<sup>73</sup> and others<sup>74</sup> have shown that prehistoric and historic Bedouin used pottery vessels obtained from trade with sedentary societies. The ubiquitous distribution of black Gaza ware pottery sherds associated with historic Bedouin sites in Israel's Negev desert is proof of this.<sup>75</sup> Today, plastic bottles, jerry cans, and other readily available vessels are used by Bedouin across the Middle East. The point, however, is that pottery, plastic, and metal jerry cans are obtained on an ad hoc basis from the "outside world"<sup>76</sup> and do not have the same meaning that carefully burished and curated "nomad-made" wooden vessels have. As shown in fig. 9, a total of 9 individuals were found with objects made from wood, including unidentifiable objects, miscellaneous fragments, bowl fragments, and complete cups. These were probably highly personal objects and were mostly associated with females (see fig. 10).

Finally, what preliminary remarks can be made about the social organization of the population excavated in the WFD Cemetery? The majority of

73. F. Hole, "Pastoral Nomadism in Western Iran," *Explorations in Ethnoarchaeology* (ed. R. A. Gould; Albuquerque: University of New Mexico Press, 1978) 192–218.

74. R. Cribb, *Nomads in Archaeology* (Cambridge: Cambridge University Press, 1991).

75. Levy, personal observation.

76. Khazanov, *Nomads and the Outside World*.

graves excavated in 1997 were undisturbed. This was inferred from the fact that capstones on these graves were sealed with a mud plaster before being in-filled. Thus, while there may be more than 3,000 unexcavated graves in the cemetery, our sample is as large as many carefully excavated mortuary sites in the archaeological record.<sup>77</sup> From the discussion above, it seems that there was no rigid social hierarchy in which positions of status were inherited, as might be expected in a non-village sedentary society. In the relatively small sample of graves (N = 62), women were given more gifts and attention in the burial ritual than men. The location of small children in their own graves near adults or included as secondary burials with adults suggests that the clusters of graves (fig. 2) observed in the cemetery represent family clusters. Only when a more statistically based analysis of the WFD 40 Cemetery's human, burial facility, and grave good inventory is made will it be possible to elaborate more on the social dimensions of this community.

### *Conclusion*

The identification of ethnicity in the archaeological record is a methodological problem fraught with difficulties. Pre-1945 German abuse of pre-history and archaeology in the name of National Socialist expansion of the German territorial state using the theories of G. Kossina has made archaeologists shy away from issues related to identifying ethnic groups archaeologically.<sup>78</sup> The quest for a purely scientific archaeology with generalized "laws of human behavior" was proposed by the "New Archaeology" in the 1960s<sup>79</sup> and resulted in an abandonment of interest in the role of historical processes on culture change. Perhaps the most important critique made by "Post-Processual Archaeology" in the mid-1980s of their "Processual" predecessors was the cry to reintegrate the role of history in archaeological analyses of the past.<sup>80</sup> It is fair to say that epigraphic and textual data are an integral part of the archaeological record. To ignore these historical sources is tantamount to throwing away the context in which archaeological phenomena were formed. Bearing in mind the mistakes of the past as highlighted in Bettina Arnold's study of National Socialist Germany, archaeologists today are challenged by the myriad of archaeological, historical, and environmental data at their disposal to explain what happened in the past. The "Post-Processual" critique

77. Chapman, Kinnes, and Randsborg, *Archaeology of Death*.

78. B. Arnold, "Past as Propaganda: Totalitarian Archaeology in Nazi Germany," *Antiquity* 64/244 (1990) 464–78.

79. P. J. Watson, S. A. LeBlanc, and C. L. Redman, *Explanation in Archeology: An Explicitly Scientific Approach* (New York: Columbia University Press, 1971).

80. I. Hodder (ed.), *Symbolic and Structural Archaeology* (Cambridge: Cambridge University Press, 1982).

has also made inroads into the archaeology of the “Holy Land” as characterized in the works of Neil Silberman.<sup>81</sup> In these works, archaeology and in particular biblical archaeology are deconstructed using the methodology of literary criticism to show the political biases of the practitioners. Even the harshest critics of biblical archaeology have not suggested that archaeologists abandon the search for the ethnic groups that pepper the biblical and extra-biblical textual sources. It is essential to confront the issue of ethnicity as revealed in these sources if we are to understand the history and archaeology of the southern Levant. However, scholars should make every effort not to repeat the errors of earlier archaeologists alluded to above. It is in this spirit that we have begun to probe the identity of the Iron Age people buried in the Wadi Fidan 40 Cemetery.

Most archaeologists and ancient historians who have carried out field work in the region of Edom have had little problem in suggesting that during the Late Bronze/Early Iron Age, Edom was home to the Shasu nomads.<sup>82</sup> However, until the recent excavations at the Wadi Fidan 40 Cemetery, there had been no site excavated in Edom that could definitely be ascribed to the Shasu.

From this recent research in the Jabal Hamrat Fidan, we have for the first time begun the task of relating the historical and textual evidence for the Early Iron Age of Edom with the archaeological record. The exact identity of the population of the Wadi Fidan 40 Cemetery as part of the “Shasu” may never be definitively established, but the archaeological and textual/historical linkages, as outlined above, suggest that in this case the archaeological record supports the biblical and historical/textual evidence.

81. N. A. Silberman, *Digging for God and Country: Exploration, Archeology, and the Secret Struggle for the Holy Land, 1799–1917* (New York: Knopf, 1982); idem, *Between Past and Present: Archaeology, Ideology, and Nationalism in the Modern Middle East* (New York: Holt, 1989).

82. Bienkowski and van der Steen, “Tribes, Trade, and Towns”; D. Hopkins, “Pastoralists in Late Bronze Age Palestine: Which Way Did They Go?” *BA* 56 (1993) 200–211; Kitchen, “Egyptian Evidence on Ancient Jordan”; Knauf, “The Cultural Impact of Secondary State Formation: The Cases of the Edomites and the Moabites,” in *Early Edom and Moab: The Beginning of the Iron Age in Southern Jordan* (ed. P. Bienkowski; Sheffield: Collis, 1992) 47–54; LaBianca and Younker, “The Kingdoms of Ammon, Moab and Edom”; Levy, Adams, and Shafiq, “The Jabal Hamrat Fidan Project.”

