

## A Reassessment of Nelson Glueck on Settlement on the Jordan Plateau in Early Bronze III and IV

Even though it has been fifty years since Nelson Glueck completed his pioneering survey of the Transjordanian plateau, it is still a difficult task to reassess fairly the results of his work in this region for the EB III-IV cultural periods. The reasons why it remains difficult seem obvious. First, only a handful of sites designated as important EB III-MB I ruins by Glueck have actually been excavated. Second, although Glueck set an admirable example in publishing his results, only selected groups of Early Bronze Age sherds were published for a small percentage of the sites surveyed. Third, although there has been a series of comprehensive surveys since Glueck's work, especially since 1970, the publication of these surveys has been sporadic and only a few projects have published the Early Bronze Age ceramic finds in detail.

### Previous Reassessments of Glueck's Survey Work

A history of varied, often contentious, judgments on the value of Glueck's survey efforts does not ease the problem of reassessment. An early review severely criticized Glueck for his lack of thoroughness in reporting on sites (Alt 1936: 163). Recent surveys have clearly demonstrated the validity of this criticism by recording large numbers of sites that were not visited by Glueck. Mittmann, for example, lists 330 sites *in addition* to the 200+ sites of Glueck between Wadi al-Yarmuk and Wadi az-Zarqa (Mittmann 1970: 3). More recent surveys also record similar differences from Glueck's totals although it should be recognized that a fair number of the newly recorded *sites* are isolated sherd scatters and buildings.

When Glueck's sites have been reexamined, there have also been, not infrequently, significant differences in results and overall interpretation. Abundant pottery has been found at sites reported by Glueck as having no pottery (Miller 1979a: 90), and numerous potsherds of certain periods when none was reported for these periods by Glueck (Mittmann 1970: 2). One of the harsher judgments, relying on an examination of his publications and a selected number of sherd bags, is that his "pottery study, and the conclusions drawn from that study are in many ways both

defective and misleading" (Franken and Power 1971: 119). In addition, some of Glueck's broad conclusions on settlement patterns, particularly for the gap in the Middle Bronze and Late Bronze periods, have been dismissed on the basis of recent evidence (Sauer 1986: 4).

Glueck has obviously not fared well in recent studies but not all the judgments on his survey work have been negative. Even his critics continue to recognize his pioneering efforts (Mittmann 1970: 1), the continuing value of his descriptive evidence in the light of the subsequent destruction of sites (Franken and Power 1971: 119) and the later substantiation of the settlement patterns he recognized for certain periods (Sauer 1986). Not surprisingly, Albright has given the most positive assessment of Glueck. He recognizes him as the first of his students to master the art of dating Palestinian pottery and comments that "during the rest of his life I recall scarcely an instance in which I was not in agreement with his assignment of given characteristic sherds to their original archaeological period," (Albright 1971: 3). Overall the pluses and minuses have been succinctly stated in the judgments that the positive evidence cited by Glueck is generally still reliable and that most of the problems in reassessing Glueck revolve around the theories he constructed based on negative evidence (Dornemann 1983: 5).

### Methodology

The positive evidence offered by Glueck for the settlement patterns on the Jordanian plateau during the EB III-IV periods is the primary concern of this article. This evidence may be assessed at several levels. First, published results from the few sites that have been subsequently excavated may be used to evaluate his conclusions on the occupational history of these sites. Then, it should be possible to reassess the published ceramic survey finds of Glueck with the help of subsequent typological refinements developed for the Early Bronze Age. Finally, where the evidence is available, even in summary form, one can compare the results of Glueck with subsequent surveys. Using these three approaches it should be possible to make some

judgments of the validity of the overall settlement patterns observed by Glueck.

We have confined the area treated to the Jordanian plateau approximately above 750m above sea level stretching from the Wadi az-Zarqa to the Ras an-Naqab south of Petra. Other papers in the conference will treat the Early Bronze Age materials north of the Wadi az-Zarqa and in various areas in the Jordan Valley. Within the area south of the Wadi az-Zarqa it seems best to proceed region by region beginning with the South and proceeding to the North as Glueck himself did. Four major areas may be considered using the major river valleys as dividing lines: the plateau region south of the Wadi al-Ḥasa to the Ras an-Naqab scarp, from Wadi al-Ḥasa to Wadi al-Mujeb, from Wadi al-Mujeb to Wadi Ḥesban and from the latter to Wadi az-Zarqa.

The time period designations continue to be debated. Glueck varied in his designations but most consistently labeled the periods in question EB III and EB IV-MB I. For the latter period Kenyon (1979), Prag (1974; 1984; 1985) and others, have stressed the intermediate nature of this period by adopting the term EB-MB. Dever (1980; 1985), and Richard (1980; 1987), have stressed the continuity with EB and the break with MB II by eliminating the term MB I and extending the EB IV term breaking it down into subdivisions of EB IVA, EB IVB and EB IVC. This latter terminology which appears to be the best fit for the picture in southern Transjordan will be used in this paper.

#### Glueck's EB IV Settlement Patterns

Before turning to an examination of the evidence, the problem of the EB III-IV settlement patterns needs to be placed in proper perspective by examining the various statements of Glueck on the patterns along with subsequent scholarly judgments.

From 1932 through 1938 Nelson Glueck took advantage of a long term residency in Jerusalem and the 'new' knowledge of the utility of ceramic typological differences based on stratigraphy to carry out a series of surveys on the Jordanian plateau. His extensive series of published preliminary and final reports, as noted above, have ever since been the starting point for scholars interested in studying the history of settlement patterns in this area.

By the publication of the third volume of his explorations, Glueck had become increasingly convinced of a series of basic features associated with the EB IV sites:

"Sufficient numbers of EB sites have now been found in southern and central transjordan to justify the conclusion that during EB IV-MB I especially, there was an extensive and intensive agricultural civilization in the land. Most of the sites are large, strongly walled, and frequently built on an eminence easy of defence." (Glueck 1939: 82).

After he had investigated similar sites between Amman

and Wadi az-Zarqa, these conclusions are reinforced. Commenting on the site of ar-Ruṣeifeh he states:

"At this site we see again the conformity to a pattern for the choice of sites in the Early Bronze Age period, which occurs with almost monotonous regularity. Given a high, flat topped hill, which is almost completely cut off from its surroundings, a strong spring nearby, and cultivable soil on the top and slopes of the hill, the fellahin of the period were almost bound to choose it as a site for fortification and settlement." (Glueck 1939: 206).

In addition to the pattern of extensive agriculture and the great walled sites of this period, Glueck assessed the pottery of EB IV-MB I to be uniform throughout the length and breadth of the land.

All three of these patterns, a highly developed agricultural system, strongly walled sites and the cultural uniformity of Trans- and Cis-Jordan were subsequently rejected for the EB IV period by most scholars in the light of later exploration and excavations. On the basis of her excavations at Jericho and other evidence from Palestine, Kenyon offers a very different assessment of this period:

"We have a clear picture of a very numerous people, not interested in town life. They were in fact pastoralists and not agriculturalists, and many of their dwellings may have been tents or shelters scattered over the hillsides, leaving little trace for the archaeologist other than the occasional potsherd." (Kenyon 1979: 143).

The results of the surface surveys in the Negeb, Sinai and Transjordan by Glueck are assessed as remains which consist mainly of potsherds and a few fragmentary walls, and are likely to be camp sites of semi-nomad seasonal pastoralists, or perhaps traders. Kenyon (1979: 144), R. de Vaux (1971: 237) and Wright (1961: 86) offer similar assessments of this period with varying degrees of emphasis.

Since 1970 this later assessment by Kenyon and others has been modified with the recognition of sizable town populations during the EB IV period (Lapp 1970: 116) and sedentary tendency of the EB IV peoples in the Jordan Valley (Prag 1985: 82). Still, a major break between the permanent settlements of EB II-III periods and the more ephemeral occupation of EB IV (EB-MB) continues to be stressed. Richard's investigations of the walled fortress of Khirbet Iskander have introduced a new element leading her to call for a radical re-interpretation of the Early Bronze III/IV horizons. Yet, she also continues to recognize a shift from "urban to non-urban and pastoral adaptive strategies" (1987: 39).

Even these qualifications of the earlier interpretations of Kenyon strongly clash with the patterns assigned by Glueck to the EB IV period. Why do the assessments of the settlement patterns of this period differ so radically? Was Glueck's evidence totally ignored or is it completely wrong

in the light of subsequent work?

The key element is understanding the settlement patterns observed by Glueck, originally uniformly assigned to EB IV, is his own recognition that some of the pottery of these 'walled' sites should be assigned to an earlier period. In the pottery notes of his third volume it is obvious that Glueck is wrestling with some of the conclusions arrived at by Wright in his study of the Early Bronze Age pottery (Wright 1937). In his comments on the history of the "pinch lapped ledge handle" (Glueck 1939: 254), Glueck notes that these handles may belong to EB II and are certainly not later than EB III. This evidence, as well as that from other forms, leads Glueck to state in his conclusions, that "there is evidence that the history of some of the Bronze Age sites south of the Wadi Zerqa also precedes EB IV, and excavations would probably reveal that their history begins with EB I." (Glueck 1939: 268). At the same time he still insists in a further conclusion that "the EB IV-MB I period, in particular in eastern Palestine south of the Zerqa, was one of a highly developed, agricultural civilization..." (Glueck 1939: 268). However, he further qualifies this judgment in the 1970 revision of *The Other Side of the Jordan*, with the statement that "the inhabitants of Jordan during this period (EB IV-MB I) and earlier were predominantly a *semi-sedentary and semi-agricultural people*" (Glueck 1970: 157) (emphasis mine).

Keeping these revisions of Glueck in mind we may now turn to review the descriptions and published evidence of the various sites originally assigned by Glueck to EB IV. To reassess Glueck's work fairly several questions need to be posed. Is it possible to reevaluate the time period of those sites that fit the patterns noted by Glueck of being located on high flat topped hills, with evident signs of thick walls, and strong springs nearby? Are these patterns as uniform as Glueck stressed? Have the new surveys turned up any contrasting patterns?

#### *Early Bronze Age Sites South of Wadi al-Ḥasa to Ras an-Naqab*

The plateau region south of Wadi al-Ḥasa rises steadily and steeply in rugged, forbidding terrain to heights ranging from 1700m to over 1850m. In May 1933 Glueck spent one week in the northern part of this area recording 28 sites, most of which were between Shobak and aṭ-Ṭafilah and none of which yielded sherds from the Early Bronze Age. During 1934, Glueck concentrated on the area south of Wadi al-Ḥasa, including an extended trip down the 'Arabah of two weeks. Approximately five weeks were spent in the area between Aqaba and Wadi al-Ḥasa in May and June of 1934. On the plateau area he recorded 209 sites, some of which had been recorded earlier and were now revisited. Only one site, Khirbet Mashmil is assigned to the Early Bronze Age on the plateau region. (Later in 1936 Glueck revisited the site of 'Ain Nejel after being shown a pushed up scalloped ledge handle from this site but was unable to find any further evidence of Early Bronze

occupation near the site). Khirbet Mashmil is described as a "maze of ruined foundations among which are some cave-cisterns." A few pieces of Nabataean and Roman pottery were recorded along with some unmistakable sherds belonging to the Bronze Age, "approximately 2200-1800 B.C." (Glueck 1935: 108). No sherds are published from Khirbet Mashmil.

Subsequent surveys in the plateau region south of Wadi al-Ḥasa have turned up further evidence of Early Bronze Age occupation. The Wadi al-Ḥasa Archaeological Survey between Wadi al-Ḥasa and aṭ-Ṭafilah recorded 50 sites yielding Early Bronze pottery (MacDonald 1988: 155). Most of these belonged to EB I (38) and EB I-II (1). Only one site had EB I-III pottery and two sites had EB IV pottery. Eight sites had EB pottery in general. The EB I-III site, Beidar Raḍwan, recorded 19 EB sherds out of a total of 233 and is described as two rectangular structures. The site also had Nabataean, Iron Age, and possible Late Bronze. The two EB IV sites, Rabab and Mashmil/al-Mushmimin also have later material and the final report concludes that it is "unlikely that the architectural remains at either site date to this period" (EB IV) (MacDonald 1988: 163). In his final assessment MacDonald states "that it appears there was both sedentary and pastoral occupation of the area during the Early Bronze Age, especially during the EB I period" (MacDonald 1988: 166). The evidence for occupation in EB III-IV, however, is severely limited.

Between aṭ-Ṭafilah and Ras an-Naqab, surveys carried out in 1984 and 1985 report only one site with possible Early Bronze occupation. At Khirbet Qurein North (Palestine Grid 19539461), near the modern village of Qurein, about 12km north of Ras an-Naqab, an antiquity site is described as a large hill covered with many walls and enclosures. Soundings were carried out in 1985 that revealed an extensive fourth millennium (Chalcolithic/Early Bronze Age?) settlement (100m east-west) with 1.5m of deposit and three clear architectural phases. The scarcity of finds did not allow for "meaningful divisions" in the pottery or flint (Hart 1987: 35) A few possible Chalcolithic or Chalcolithic/Early Bronze sherds were mentioned in the 1984 report in which it was stated that "virtually no material pre-dating the Iron Age was found" (Hart and Falkner 1985: 257).

South of Ras an-Naqab to Aqaba the surveys of Jobling have focused on the epigraphic remains (1981; 1982; 1983a,b). Some Chalcolithic sites are reported but there is a general chronological gap in the region between the Chalcolithic and Iron Ages. At one site, Tell al-Kharaza, Pal. Grid 194911, a rock shelter cave was sounded with the assistance of Crystal Bennett and 19 levels were recorded from the pottery Neolithic to the end of the Middle Bronze Age but no further information is given on the various periods represented (Jobling 1983a).

In addition to these few sites some EB IV-MB I pottery is recorded near Petra from a settlement near Wadi Musa

Table 1 Glueck's Early Bronze Age sites between Wadi al-Ḥasa and Wadi al-Mujeb.

Site Name	Pal. Grid	Est. Size	Type	Later Occupation
al-Lajjun	232.5/072.2	18 ha	Walled	Roman, Ottoman
al-Balu'	224.5/085.5	?	Walled	Iron, Nabataean
Rujm al-Oleib	223.3/092.0	0.25 ha	Tower?	Nabataean
Kh. Mes'ar	221.3/086.5	?	Ruins	EI 1, Nabataean, Arab
al-Maṣna'	223.0/077.0	0.4 ha	Possible walled	EI 1, MB II, Nabataean
Ader	223/067	4 ha	Walled	EI, Roman, Byzantine
al-'Aineh	223.7/043.0	"Large"	Acropolis	Nabataean
Kh. Umm as-Sedeirah	215.0/047.0	"Large"	Walled?	Nabataean
Kh. aṣ-Ṣerarah	213.0/048.0			Nabataean
Mudawarah	212.5/051.2	2 ha	Walled	Hellenistic
Feqeiques	211.0/054.1	"Large"	Wall traces	Nabataean, Arab

(Kirkbride 1959; Parr 1960b).

Although some new sites have been recorded for this area since Glueck, particularly for EB I, it seems clear that the settlement pattern assessment of Glueck for EB III-IV has not been substantially altered. This region was only sparsely occupied during EB III-IV and none of the sites in the region fit the pattern of heavily walled sites located on top of a large flat hill.

#### *From Wadi al-Ḥasa to Wadi al-Mujeb*

TABLE 1 lists the Early Bronze IV sites recorded by Glueck in the plateau region between Wadi al-Mujeb and the Wadi al-Ḥasa. The Palestine Grid co-ordinates used in the tables are taken from the Ross catalogue of Early Bronze Age sites (1987). These co-ordinates frequently differ slightly from those found in Thompson (1979).

Three of the sites, al-'Aineh, Khirbet Umm as-Sedeirah, and Khirbet aṣ-Ṣerarah, are located on the northern slopes of Wadi al-Ḥasa.

Two others, Mudawarah and Feqeiques, are on the plateau south of Karak and the remaining six are on the plateau north of Karak.

Glueck published pottery from four of these sites, all in the South: al-'Aineh, Khirbet Umm as-Sedeirah, Mudawarah, and Feqeiques. The pottery from al-'Aineh includes both EB III forms, wavy ledge handles and inverted rim platter bowls, and EB IV forms with vestigial handles and 'tea pot' rims (Glueck 1935: Pl. 25b: 14-25). The Emory University team recorded sherds at al-'Aineh from EB II-III (31) and EB IV (59) (Mattingly 1984: 89). At Khirbet Umm as-Sedeirah a series of pushed up and pushed up and scalloped ledge handles published by Glueck are probably EB III but most of the material including rolled and flattened rims, pinch-lapped handles and scalloped rims and bands fit comfortably in the EB IVA period (Glueck 1939: Pl. 1,2). This site with its evidence of ancient terrace walls appears to be one of the major reasons why Glueck argues for an extensive agricultural component in the EB IV phase (Glueck 1939: 82-83), later reassessed to EB

II-IV (Glueck 1970: 145). Miller's Moabite survey lists sherds at Khirbet Umm as-Sedeirah for EB I (5), EB II-III (35), and EB IV (19) but also more numerous sherds from the Middle Bronze (46) and Late Bronze (23) (Mattingly 1984: 85). Only a few sherds from Mudawarah, a pinch lapped ledge handle and a small cup with grooving on the exterior, appear to be EB IV. Most of the material is earlier in the Early Bronze (Glueck 1939: Pl. 3). The Emory team describes the sherds as predominantly Early Bronze with 33 from EB II-III. The pottery from Feqeiques appears to be the latest from these four sites with folded down, ribbed rims, vestigial handles, and raised molded bands (Glueck 1939: Pl. 4), but the latest survey also includes EB II-III (38) with the predominant group from EB IV (160) (Mattingly 1984: 83).

The site of Mudawarah is the only site that clearly fits the pattern of a strongly walled site on top of an isolated hill with a strong spring nearby. The pottery from this site basically predates EB IV. Feqeiques might fit the pattern since Glueck does describe traces of a thick wall at the top of the hill but the large number of Nabataean and later Arabic sherds make this site more questionable.

Among the remaining sites, al-Lajjun is the best candidate for a walled EB III town in this area. It is the largest of the plateau sites and contains an acropolis area with corner towers. The central Moab survey recorded both EB II-III and EB IV material at al-Lajjun (Mattingly 1983: 486). It is interesting that Glueck reports that most of the EB IV material at this site was on the lower southern slopes of the tell between the springs and the east wall. On several visits to this site I have noticed the same distribution. It is possible that a change in settlement pattern occurred at al-Lajjun similar to that observed at Bab adh-Dhra' where the EB IV settlement is concentrated outside the main EB II-III tell.

Ader remains the most problematic site. The soundings here in 1933 outside the walled area of the tell recorded three levels but the published pottery all fits within the EB IV range (Cleveland 1960: Pl. 13-15). On the other hand

Table 2 Glueck's Early Bronze Age IV sites between Wadi al-Mujeb and Wadi Ḥesban.

Site Name	Pal. Grid	Est. Size	Type	Later Occupation
Jawa		2 ha	Walled	EI 1,2
Jalul	231.0/125.0			EI 1,2, MB, LB
al-Lahun	230.5/097.0	4.5 ha	Walled	Nabataean
'Ara'er	228/098	0.25 ha	Building	
Kh. Qarn al-Kabsh	223.5/128.0	2.7 ha	Walled	
Kh. al-'Aqrabah	226.0/098.3		Exposed cut	Nabataean, Roman, Byzantine, Arab
Kh. Iskander	223.3/107.2	2.2 ha	Walled	
Kh. Abu Khirqah	221.6/108.0	"Large"	Wall fragments	

(TABLE 2 does not include four sites that are mentioned by Glueck because no sherd evidence is cited.)

the central Moab survey recorded a large number (67) of EB II-III sherds at Ader in addition to those (99) assigned to EB IV (Mattingly 1983: 484).

At al-Balu', Crowfoot's soundings within and nearby the walled area on the southern rim of Wadi Qurri produced only Iron and later strata (Crowfoot 1934). Glueck appears to have found most of the EB IV sherds here on dumps below the tell. The central Moab survey recorded only a few Early Bronze sherds from the walled area but also discovered a large sprawling site north of Wadi Qurri, al-Balu' (N), with wall remains and predominantly EB IV pottery (Mattingly 1983: 484). Rujm al-Qleib is a small site with wall remains and some later pottery. From the Early Bronze Age, Glueck recorded only EB IV but an examination of the pottery from this site stored at the Smithsonian revealed earlier phases including line group wares from EB IB. The Emory survey found predominantly earlier pottery at this site (187 from EB II-III) but EB IV was also well represented (95) (Mattingly 1983: 484).

In addition to the sites mentioned above, the Emory University team recorded a number of significant Early Bronze Age sites missed by Glueck. Prominent among the new sites are two large tells with over 50% of their pottery from the Early Bronze Age: Rujm Birjes and Rujm Munsahilah. Rujm Birjes is a walled town area that appears to fit Glueck's pattern of a fortified site on an isolated hill top with a nearby spring. Most of the pottery (89%) from this site was Early Bronze with the great majority of the sherds from EB I-III (215) and a small number (14) from EB IV (Mattingly 1984: 78). Another tell with predominant EB II-III pottery is Rujm Munsahilah with 92% Early Bronze Age, including 160 EB I-III and 9 EB IV (Mattingly 1984: 78). Three smaller sites with predominantly Early Bronze Age pottery include two sherd scatters, Karyah and al-Balu' (S), and a dolmen structure north of ad-Dimnah. Two tells, Ḥumeimat NW and Umm al-Habaj, have materials predominantly later than the Early Bronze Age but also include a good representation of EB IV pottery (Mattingly 1983: 484-485).

Although the reassessment of Glueck's material and the new information available from the more recent survey do

help, it is still difficult to reconstruct accurately the settlement patterns of the Early Bronze Age in this area. There was obviously extensive Early Bronze occupation but the changing patterns of settlement appear much more complex than envisaged by Glueck (Mattingly 1983: 487-488). One may conjecture that sites such as Mudawarah, al-Lajjun, Rujm Birjes and possibly Rujm Munsahilah best fit the pattern of strongly walled EB II-III sites. A second group, Rujm al-Qleib, Ader and Umm as-Sedeirah appear to have been occupied continuously from EB II to EB IV. Still others appear to have been more extensively occupied in EB IV: Ḥumeimat (NW), Umm al-Habaj, Feqeiqes, Khirbet aṣ-Ṣerarah, and al-'Aineh. Al-Balu' (N) stands out as an open village type, exclusively EB IV.

#### *Between Wadi al-Mujeb and Wadi Ḥesban*

Glueck published pottery from four sites between Wadi al-Mujeb and Wadi Ḥesban: Qarn al-Kabsh, Khirbet al-'Aqrabah, Khirbet Iskander and Khirbet Abu Khirqah (cf. TABLE 2). The pottery from Khirbet al-'Aqrabah and Khirbet Iskander is all EB IV and the sherds published from Qarn al-Kabsh and Khirbet Abu Khirqah are predominantly earlier. The excavations at Khirbet Iskander have demonstrated that it was a fortified site of EB IV (Richard and Borass 1988). Later excavations have also located a large cemetery nearby which included tombs of EB I and EB IV. Khirbet al-'Aqrabah is described as a long flat topped spur with large quantities of EB IV pottery on the slopes. No traces of houses or walls were found (Glueck 1939: 113-14). Khirbet Abu Khirqah is located in Wadi al-Walah to the west of Khirbet Iskander. Some wall fragments of large, roughly hewn flint blocks, were observed. The location of the site above a strong source of water on the slope of a hill reminded Glueck of the site of al-Lajjun (Glueck 1939: 130). The evidence is slim but it is possible that Khirbet Abu Khirqah may have been a fortified site of EB II-III.

Excavations at 'Ara'er revealed it to be an unwalled settlement of EB IV with two phases. There was some evidence that agriculture was practiced. Later occupation included a fortress of the Iron Age and Hellenistic and

Table 3 Glueck's Early Bronze Age sites between Wadi Ḥesban and Wadi az-Zarqa.

Site Name	Pal. Grid	Est. Size	Type	Later Occupation
Kowm Yajuz	237.7/160.0	1.5 ha	Walled	EI 1,2
Kh. Umm ar-Rujum	237.5/159.0	0.4 ha	Walled	
ar-Ruṣeifeh	248.0/158.7	0.4 ha	Walled	EI 1,2
Kh. ar-Ruṣeifeh	248.7/158.7			EI 1,2
Kh. Abu Ḥamed	233.7/166.0		Walled	EI 1,2
Mumani	229.5/167.0		Buildings	EI 1,2, Byzantine, Hellenistic
al-Qseir	225.0/163.7	3.5 ha	Walled	
Rujm al-'Aṣaiḡh			Small mounds	EI 1,2, Byzantine, Arab
Kh. Ureimeh	226.0/175.2	0.3 ha	Tower	Byzantine, Arab
Kh. Juret al-Khazneh	226.7/168.2	Small		EI 1,2, Byzantine
Tell al-Ureimeh	225.0/167.7	0.8 ha	Walled?	Byzantine, Arab
at-Teleil	228.7/169.5	0.3 ha		EI 1,2
Kh. ar-Rumman	228.5/174.2	0.3 ha	Walled	EI 1,2, Byzantine, Arab
Kh. Abu Zebna	229.5/177.2	Small		EI 1,2, Roman, Byzantine
Kh. al-Meshobesh	230.0/172.7	0.8 ha	Walled	Roman, Byzantine
Kh. al-Ḥawaja	241.0/172.7		Stone circle	Byzantine
Kh. al-Breitawi	251.2/165.7	0.2 ha		Byzantine, Arab
ar-Reḡheil	249.5/170.5	1.7 ha	Wall, towers	Byzantine, Arab
Kh. Wadah	249.2/173.5	'Large'		EI 1,2, Roman, Byzantine
an-Nimrah	248.0/172.7	'Small'	Village	EI, Roman, Byzantine, Arab
Kh. al-Bireh	246.2/173.7	'Large'	Wall traces	EI 1,2, Roman, Byzantine, Arab
Kh. Ṣakhara	240.0/176.2	'Small'		EI 1,2, Roman, Byzantine
Kh. Momghareh	241.3/177.5		Traces	Byzantine
Tell Faqahiyeh	238.0/176.7		No walls	EI 1, Byzantine
Kh. Banat	236.2/177.5		Buildings	Byzantine, Arab
Tell Faqqas	235.0/180.0	0.4 ha	Wall traces	EI 1,2, Roman, Byzantine, Arab
Kh. aṣ-Ṣuwari	229.0/178.2		Wall traces	EI 1,2, Byzantine, Arab
Tell ar-Reḡheil	226.2/177.2	0.6 ha	Wall traces	EI 1,2, Byzantine

(Umm Tell and Rujm al-Beida, which are at lower elevations in Wadi az-Zarqa, are not included in TABLE 3).

Nabataean levels (Olavarri 1969).

At al-Lahun, Glueck described and planned two walled areas on the southern limits of this site separated by a wadi. The larger walled site on the east (4.5 ha) contained large quantities of EB IV pottery but the brief descriptions given, such as plain ledge handles, suggest that some of this material could be earlier (Glueck 1934: 48). Soundings in the western walled area have dated the walls there to Late Bronze-Iron with some previous EB I occupation. An EB IB tomb has also been recovered to the north above the Nabataean area of the site (Homès-Fredericq and Naster 1982; 1984; Naster and Homès-Fredericq 1979).

Khirbet Qarn al-Kabsh is one site in this region described by Glueck that appears to fit his pattern of a walled site located on high flat topped hill. It is a large site (2.7 ha) with large quantities of EB sherds which, from the publication, appear to be EB I-III. The Ḥesban survey describes this site (al-Qarn) as walled and exclusively Early Bronze, including EB III (Ibach 1988: 151). Another possible candidate is Jalul that is listed among the EB-MB sites by Glueck, although its pottery is described as mostly Early Iron with some from the Middle and Late Bronze (Glueck 1934: 5). The Ḥesban survey lists Jalul as one of three major sites in this area with substantial Early Bronze Age pottery. The others are Tell Iktanu, visited by Glueck in his Jordan Valley survey, and Tell al-'Umeiri which is

not described by Glueck. The current excavations at Tell al-'Umeiri have excavated several phases of the late Early Bronze Age (possibly "late EB III" and EB IV pottery, Herr, personal communication) on the northern terrace of the tell (Geraty, Herr and LaBianca 1985). Umm al-'Amad is described as a fourth major site but with light representation of Early Bronze (Ibach 1988: 155). The survey recorded 46 Early Bronze Age sites in the Ḥesban area, with the Early Bronze dominant at eight sites. Ibach concludes that the "EB settlements were located mainly in well-watered areas where cultivation and vine dressing were convenient and defense was not a primary concern." (Ibach 1988: 155).

Again, in this area, the settlement patterns are much more complex than those discerned by Glueck. 'Ara'er and Khirbet Iskander represent two different types of settlement in the EB IV, unwalled and walled. Qarn al-Kabsh appears to be the best candidate for a walled EB II-III settlement. Other possibilities are Jalul, Tell al-'Umeiri, Khirbet Abu Khirqah and al-Lahun.

#### *Between Wadi Ḥesban and Wadi az-Zarqa*

TABLE 3 lists the Early Bronze Age sites recorded by Glueck between Wadi Ḥesban and Wadi az-Zarqa.

The heaviest concentration of EB IV sites recorded by Glueck occurs in this area, particularly along Wadi

az-Zarqa. Thirty sites are listed, although only four appear to be over 1 ha. Fourteen sites are described as walled and located on a high hill and from this group the pottery is published for six: Kowm Yajuz, Khirbet Umm ar-Rujum, ar-Ruṣeifeh, al-Qṣeir, Tell Faqqas and Tell ar-Reḥeil. Kowm Yajuz is described as on top of a high hill, enclosed by a great wall, and completely destroyed. The published pottery all appears to be EB III or earlier with no obvious EB IV forms (Glueck 1939: Pl. 12). Only one sherd each is published from the sites of Khirbet Umm ar-Rujum and al-Qṣeir, both of which are pushed up EB III or earlier ledge handles. Al-Qṣeir has recently been revisited by the team surveying the Baq'ah Valley and described as having an encircling defense wall with pottery from EB II-IV (McGovern 1980: 64). The pottery from Tell Faqqas (Pl. 16) and Tell ar-Reḥeil appears to belong to EB I and IV while that of ar-Ruṣeifeh is predominantly EB IV.

A recent survey in the ar-Rummam area lists 31 sites or parts of sites as occupied during the Proto-Urban but few sites (one is at-Tell) are assigned to the Early Bronze II-III. Two sites offered some EB IV evidence, Umm al-Basatin II (Pal. Grid 229.7/175.3) and Wadi Dulani I (site 34) (Gordon and Knauf 1987).

As in the southern regions, the published ceramic evidence is limited but it is clear that Early Bronze occupation is extensive. Many of the sites have traces of walls and are located on high hills with springs nearby and it seems to be this region that best testifies to Glueck's observed patterns. However, most of the sites also have Iron Age occupation. Only excavation will determine the history of these sites but it does appear that the larger sites such as Kowm Yajuz and al-Qṣeir definitely have EB II-III materials and these sites may reflect the patterns observed in the south and elsewhere in Palestine of the EB II-III town culture.

#### Conclusions

It seems clear that the true nature of the settlement patterns in the areas described will not emerge until many more sites are excavated. South of Wadi al-Ḥasa, there does not appear to have been extensive settlement during EB III-IV on the plateau. In the central region there are several very promising walled sites that seem likely to be fortified EB II-III sites such as Mudawarah, al-Lajjun and Rujm Birjes, while many others appear to be open village EB IV sites. Similar complex settlement patterns appear to be present in the north up to Wadi az-Zarqa, with the latter area apparently containing the largest number of Early Bronze walled sites but the later occupation of many of these sites calls for caution in assigning the construction of the walls to the Early Bronze Age.

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