

# PRELIMINARY REPORT ON THE SURVEY OF THE DHĪBĀN PLATEAU, 1997

by

Chang-Ho C. Ji and Jong-Keun Lee

The second season of the Dhibān Plateau Project took place between July 20 and August 24, 1997. The authors directed the survey on behalf of La Sierra University and Korean Sam Yook University. Ahmad al-Shami was the representative from the Department of Antiquities, and Jae-Hyuk Kwak, Matthew Schlitz, and Byung-Suh Yoo participated in the survey as core field staff.

## Research Purpose and Methodology

The primary goal of the Dhibān Plateau Project is to understand the occupational history and settlement pattern of the Dhibān Plateau. The significance and specific objectives of the project were dealt with in detail in the preliminary report of the first field season (Ji 1997; Ji and 'Attiyat 1997).

In particular, the purpose of the 1997 field season was threefold: (1) to locate new archaeological sites in the regions of ar-Rāmah-as-Sāliya and 'Aliyyān-'Ammūriya; (2) to revisit Glueck's sites to re-examine his dating of each site in these regions; (3) to compare the occupational history and settlement pattern of the two regions. To these ends, in 1997, a major effort was centered on the collection of pottery and artifacts at each site. In addition, the survey team recorded various features of each site and made sketch maps for all the visited sites. Off-site features were located and documented as well. *The Madaba Plains Project Survey Manual* designed by Larry Herr and Gary Christopherson (1996) was the main guide for data collection.

The Dhibān Plateau Project surveys the area located between the Wādī al-Mūjib in the south and the Wādī al-Wāla in the north.

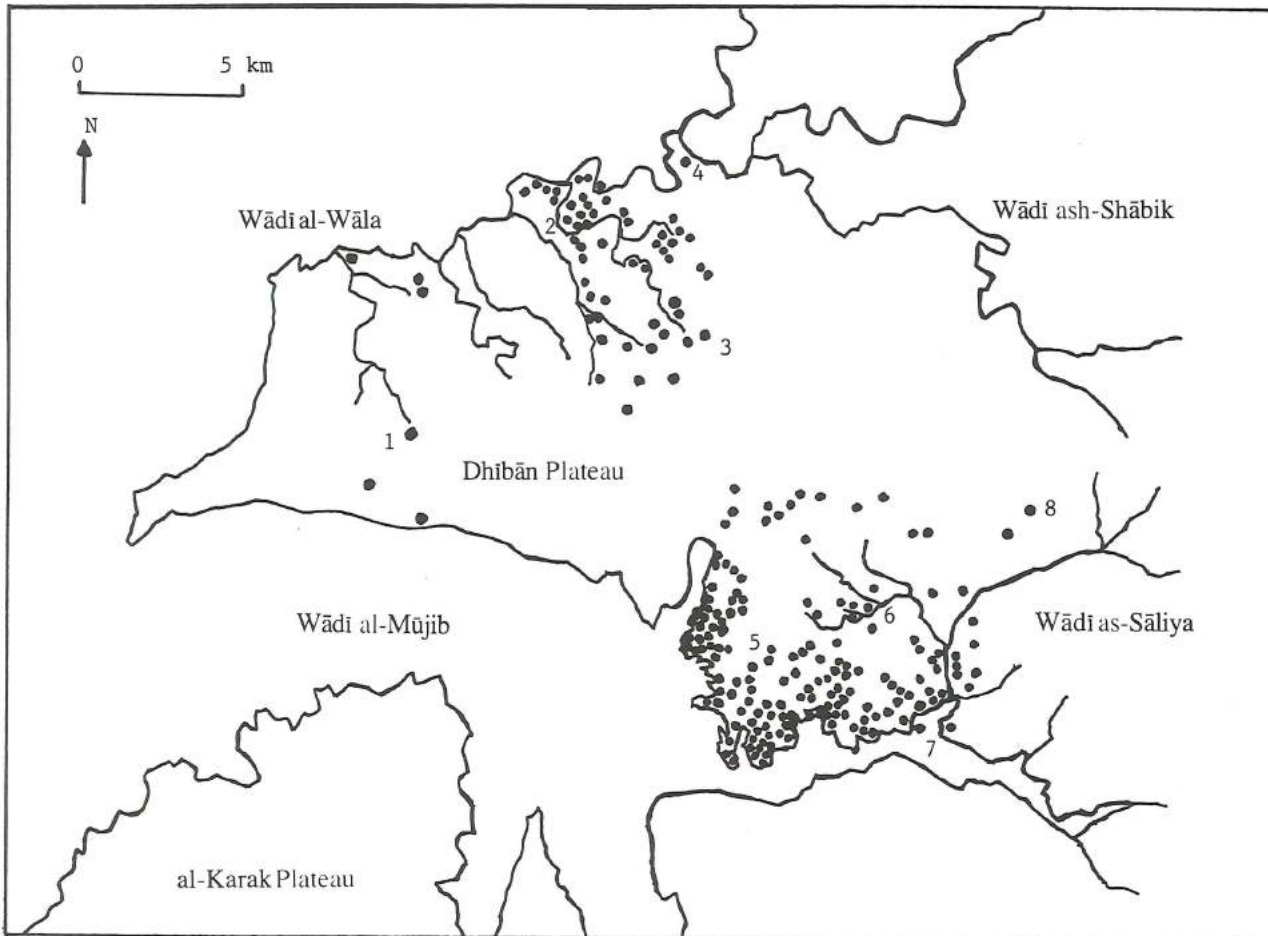
The survey area extends about 25 km east from Dhibān to the Wādī ash-Shābik. Although excursions may be conducted into the eastern desert fringe and the canyons of the Wādī al-Mūjib and the Wādī al-Wāla, systematic surveying will be limited to the plateau proper, an area of approximately 250 km<sup>2</sup>.

The survey area is divided into about 250 parcels of 1 km x 1 km. The 1 sq. km grid of a 1:50,000 scale Universal Transverse Mercator map is used to identify these 250 parcels, and each of these squares is assigned a sequence number. To take advantage of the larger 1:25,000 scale, the actual positions of the survey parcels are established on older Palestine regional topographic maps produced in 1958.

The Global Positioning System is used to increase the precision with which selected parcels are located. For each square, the survey is conducted in an essentially east-west and south-north direction. Each 1 x 1 km<sup>2</sup> is surveyed in a systematic way, employing a series of 200 m spaced traverses. In other words, each square is divided into five 0.2 x 1.0 km sectors, and the survey team walks or drives systematically. In this way, no part of the area is either under- or over-represented in the survey. Exceptions to this approach are the squares which contain previously known or conspicuous archaeological sites. In this case, the sites are examined first, and then their vicinity is explored.

## Survey Results

In 1997, a total of 204 archaeological sites were visited. These sites, when added to the 11 sites visited in 1996 (Fig.1), bring



1. Archaeological Survey of the Dhibān Plateau, 1996 and 1997. 1. Dhibān; 2. Khirbat 'Ammūriya; 3. Khirbat 'Aliyyān; 4. Khirbat ar-Rumayl; 5. Khirbat ar-Rāmah; 6. Khirbat as-Sāliya; 7. Khirbat al-Mdayyneh as-Sāliya; 8. Khirbat al-Musayṭiba.

the Dhibān Plateau Survey Site total to 215. One-hundred-ninety-four of the 204 sites surveyed in 1997 are new archaeological sites. Eight sites were previously visited by Glueck: Khirbat al-Musayṭiba, Khirbat al-Mdayyneh as-Sāliya, Khirbat ar-Rāmah, Khirbat 'Ammūriya, Khirbat al-Kaum, Umm ash-Shujayrāt ash-Shiyāb, Umm ash-Shujayra al-Gharbiyya, Khirbat al-Qahqaha, and Hashāsh.

Of the 215 sites recorded during the 1996 and 1997 seasons, 25 sites (11.63%) contained pottery sherds dated to the Chalcolithic and Early Bronze periods (Fig.2). Late Bronze sherds came from six sites (2.79%), whereas Iron I, Iron II, and Persian sherds were found at 13 sites (6.05%), 27 sites (12.56%), and eight sites (3.72%) respectively. Thirty sites (13.95%) pro-

duced Hellenistic sherds; 55 sites (25.59%) had Roman sherds. Byzantine sherds came from 75 sites (34.88%). Early Islamic and Middle Islamic sherds were found at 22 sites (10.23%) and 17 sites (7.91%) respectively.

Six of the 215 sites (2.79%) were situated at the bottom of a wadi, whereas 38 sites (17.67%) were located in the central plain of the Dhibān Plateau. It is interesting to notice that 171 sites (79.53%) were found in the band about 2 km wide along the edge of the plateau, suggesting fairly high concentrations of sites along the plateau rim (see Table 1 for the regions of ar-Rāmah-as-Sāliya and 'Aliyyān-'Ammūriya).

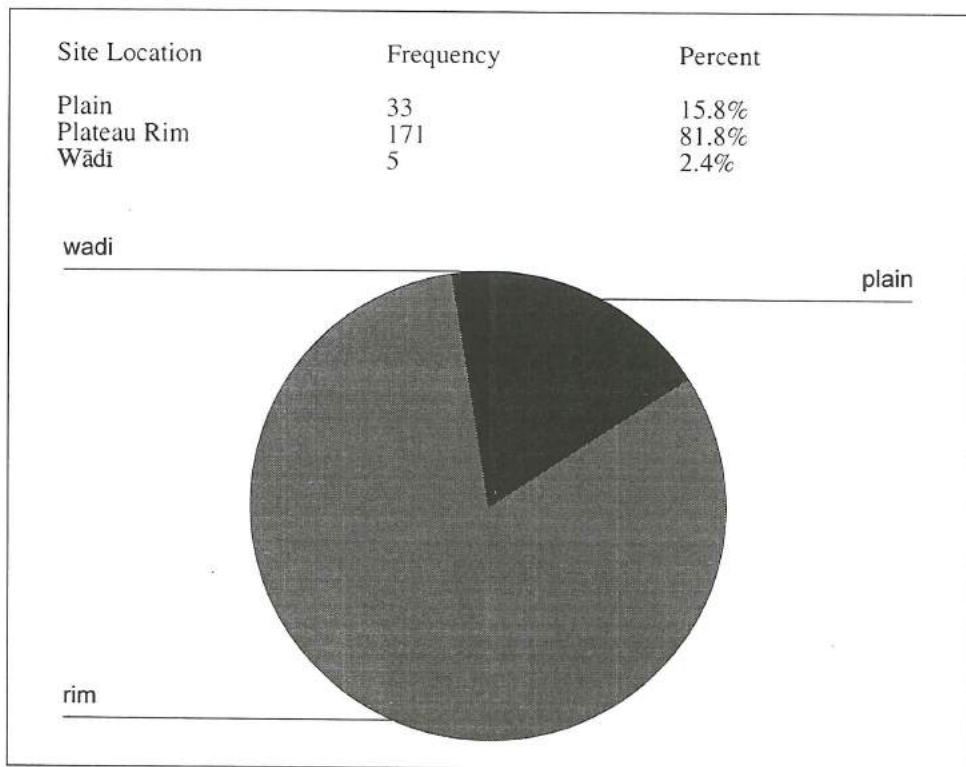
On the other hand, watch-tower sites accounted for 60.93% of the total (131 of 215 sites), while city or village sites made up

No.	Provenance	Date/Type	Descriptions
1	Site 14	Roman bowl	wheel-made, light red clay (2.5YR 6/8), yellowish red slip (5YR 5/8) (E*, I*), no core, no inclusions, diameter 22.5 cm
2	Site 20	Iron II bowl	wheel-made, pink clay (7.5YR 7/3), light gray core (5YR 7/1), many small to large white inclusions, diameter 9 cm
3	Site 20	Iron II storage jar	wheel-made, light reddish brown clay (2.5YR 7/4), light red slip (E) (2.5YR 6/6), reddish gray paint (E) (2.5YR 5/1), no core, many small to medium white and gray inclusions, diameter 28 cm
4	Site 20	Hell-Early Rom bowl	wheel-made, very pale brown clay (10YR 7/3), light gray core (10YR 7/1), no inclusions, diameter 11.5 cm
5	Site 20	Hell-Early Rom bowl	wheel-made, yellowish red clay (5YR 5/8), gray core (5YR 6/1), few small inclusions, diameter 14 cm
6	Site 20	Hellenistic storage jar	wheel-made, pink gray clay (7.5YR 7/4), no core, some very small white and gray inclusions, diameter 9.5 cm
7	Site 20	Hellenistic storage jar	wheel-made, light red clay (2.5YR 7/6), pink slip (7.5YR 7/3) (E, I), light gray core (7.5YR 7/1), many small white inclusions, diameter 7.5 cm
8	Site 20	Nabataean bowl	wheel-made, light red clay (10R 6/6), red paint (10R 5/6) (I), no core, no inclusion, width 2.5 cm
9	Site 20	Nabataean bowl	wheel-made, light red clay (10R 6/6), red paint (10R 5/6) (I), no core, no inclusion, width 2 cm
10	Site 153	Iron I storage jar	wheel-made, light reddish brown clay (5YR 6/4), gray core (7.5YR 5/1), many small to medium white and gray inclusions, diameter 21 cm
11	Site 152	Mid Islamic Jar	hand-made, very pale brown clay (10YR 8/2) pink slip (7.5YR 7/2) (E), light reddish gray core (2.5YR 7/1), dark gray paint (5YR 4/1) (E), no inclusions, diameter 9 cm
12	Site 152	Hellenistic cooking pot	wheel-made, weak red clay (10YR 5/3), greenish gray core (10Y 5/1), no inclusions, diameter 10 cm
13	Site 152	Nabataean bowl	wheel-made, light red clay (2.5YR 6/6), red paint (10R 5/6) (I), reddish gray core (2.5YR 5/1), no inclusions, diameter 13.5 cm

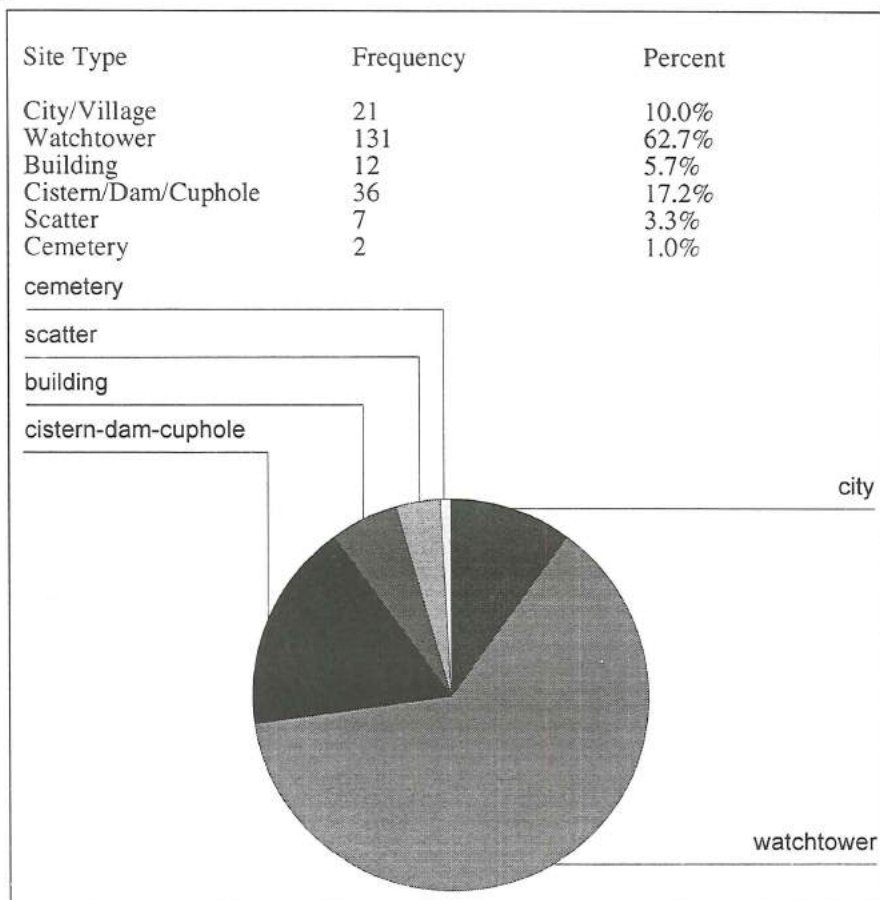
\*E: Exterior; I: Interior.

2. Selected Pottery from the Dhibān Plateau.

Table 1. Frequency Table and Pie Chart by Site Location in the Regions of ar-Rāmah-as-Sāliya and 'Aliyyān - 'Ammūriya (N=209).



**Table 2.** Frequency Table and Pie Chart by Site Type in the Regions of ar-Rāmah-as-Sāliya and ‘Aliyyān-‘Ammūriya (N=209).



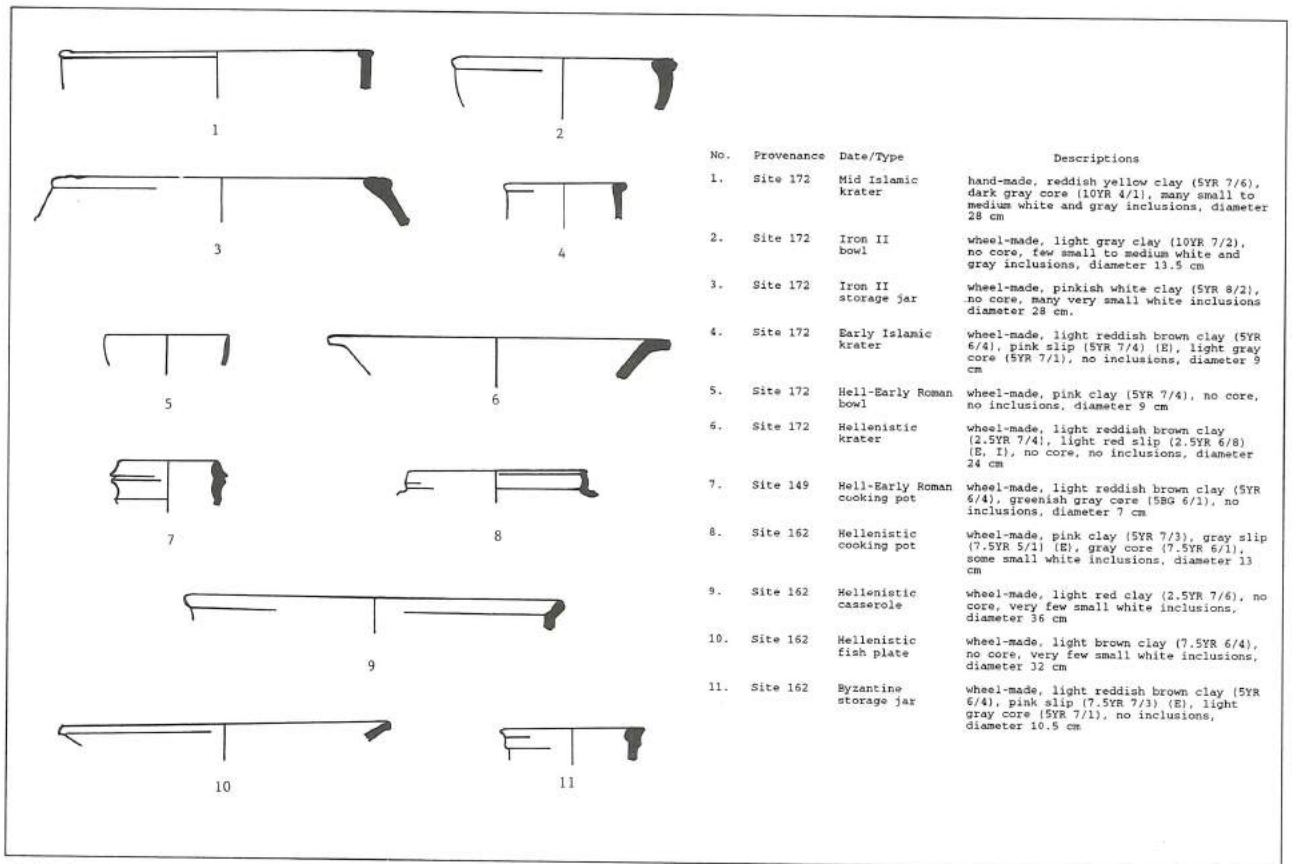
11.16% (24 sites). Thirty-seven sites (17.21%) were identified as agricultural dams or water cisterns. The remaining sites consisted primarily of farmstead buildings (12 sites; 5.58%), road features (two sites; 0.93%), and cemeteries (two sites; 0.93%). Seven sites (3.26%) merely produced pottery sherds or lithic tools without any architectural evidence (see Table 2 for the regions of ar-Rāmah-as-Sāliya and ‘Aliyyān-‘Ammūriya).

To put it more precisely, in the ar-Rāmah-as-Sāliya region, pottery of the Chalcolithic and Early Bronze periods was collected at 18 sites, that is, 11.84% of the sites explored in the region (see Table 3). Pottery of the Middle Bronze period was completely absent. Late Bronze and Iron I pottery was found at five sites (3.29%) and 10 sites (6.58%) respectively. Iron II and Persian pottery came from 19 sites

(12.50%) and four sites (2.63%) respectively, and Hellenistic pottery was collected at 20 sites (13.16%). The Roman and Byzantine periods witnessed a flourishing population with at least 38 sites (25.00%) and 61 sites (40.13%) occupied respectively (Table 3 and Fig. 3). This region experienced a substantial decline in population during the Early and Middle Islamic periods when 16 sites (10.53%) and ten sites (6.58%) were occupied. This cyclic settlement pattern over the periods seems to be distinctive along the plateau rim and in the plain region except for the wadi region. Likewise, in the Aliyyān-‘Ammūriya region the Roman and Byzantine periods had substantial population, with 13 (22.81%) and 12 (21.05%) of 57 sites yielding Roman and Byzantine pottery (see Table 4). This region experienced a somewhat reduced occupation in the Chalcolithic and Early Bronze (six sites, 10.53%),

**Table 3.** Cross-Tabulation by Site Location, Site Type, and Chronology in the ar-Rāmah-as-Sāliya Region. (N=152).

Location	Site Type	Chronology											Total
		CEB	MB	LB	II	I2	Per	Hel	Rom	Byz	EIs	MIIs	
Plain (n=27)	City	2	0	2	2	2	0	3	3	2	2	3	3
	Watch-tower	0	0	0	0	0	0	0	0	0	0	0	0
	Building	0	0	0	0	1	0	0	1	1	1	0	1
	Cistern-Dam	3	0	0	1	1	1	4	3	12	5	3	23
	Scatter	0	0	0	0	0	0	0	0	0	0	0	0
	Cemetery	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>7</b>	<b>7</b>	<b>15</b>	<b>8</b>	<b>6</b>	
Plateau Rim (n=122)	City	5	0	1	1	2	2	4	4	5	3	1	9
	Watch-tower	6	0	2	5	11	0	4	17	32	3	2	92
	Building	1	0	0	0	0	0	0	1	2	0	0	7
	Cistern-Dam	0	0	0	0	0	0	2	4	1	1	1	7
	Scatter	0	0	0	0	1	0	2	4	4	1	0	7
	Cemetery	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>12</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>14</b>	<b>2</b>	<b>12</b>	<b>30</b>	<b>44</b>	<b>8</b>	<b>4</b>	
Wādi (n=3)	City	0	0	0	1	1	1	1	1	1	0	0	1
	Watch-tower	0	0	0	0	0	0	0	0	0	0	0	1
	Building	1	0	0	0	0	0	0	0	1	0	0	1
	Cistern-Dam	0	0	0	0	0	0	0	0	0	0	0	0
	Scatter	0	0	0	0	0	0	0	0	0	0	0	0
	Cemetery	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	
<b>Total</b>	<b>18</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>19</b>	<b>4</b>	<b>20</b>	<b>38</b>	<b>61</b>	<b>16</b>	<b>10</b>		



3. Selected Pottery from the Dhibān Plateau.

Table 4. Cross-Tabulation by Site Location, Site Type, and Chronology in the Aliyyān-Ammūriya Region (N=57).

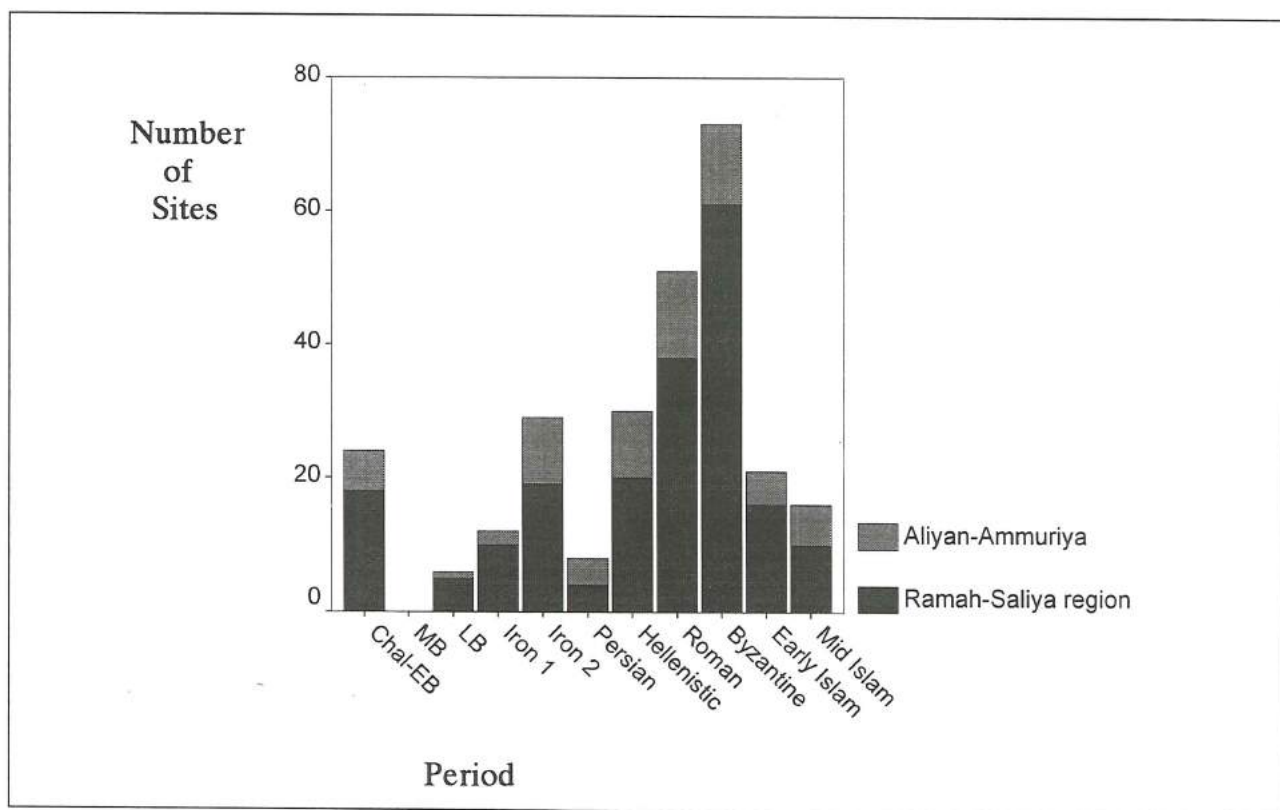
Location	Site Type	Chronology											Total
		CEB	MB	LB	I1	I2	Per	Hel	Rom	Byz	Els	MI5	
Plain (n=6)	City	1	0	1	1	1	0	1	2	1	1	2	2
	Watchtower	0	0	0	0	0	0	0	0	0	0	0	2
	Building	0	0	0	0	0	0	0	0	0	0	0	0
	Cistern-Dam	0	0	0	0	0	0	0	0	0	0	0	2
	Scatter	0	0	0	0	0	0	0	0	0	0	0	0
	Cemetery	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1	0	1	1	1	0	1	2	1	1	2	
Rim (n=49)	City	3	0	0	1	4	2	4	4	4	4	3	6
	Watchtower	2	0	0	0	3	2	4	5	3	0	1	36
	Building	0	0	0	0	0	0	1	1	1	0	0	2
	Cistern-Dam	0	0	0	0	0	0	0	0	2	0	0	4
	Scatter	0	0	0	0	0	0	0	0	0	0	0	0
	Cemetery	0	0	0	0	0	0	0	0	0	0	0	1
	Total	5	0	0	1	7	4	9	10	10	4	4	
Wādi (n=2)	City	0	0	0	0	0	0	0	0	0	0	0	0
	Watchtower	0	0	0	0	0	0	0	0	0	0	0	0
	Building	0	0	0	0	1	0	0	0	1	0	0	1
	Cistern-Dam	0	0	0	0	0	0	0	0	0	0	0	0
	Scatter	0	0	0	0	0	0	0	0	0	0	0	0
	Cemetery	0	0	0	0	1	0	0	1	0	0	0	1
	Total	0	0	0	0	2	0	0	1	1	0	0	
Total	6	0	1	2	10	4	10	13	12	5	6		

Iron II (10 sites, 17.54%), Persian (four sites, 7.02%), Hellenistic (10 sites, 17.54%), Early Islamic (five sites, 8.77%), and Middle Islamic periods (six sites, 10.53%). The period from the Middle Bronze period to Iron I seems to have had a substantial decline in settled population. The basic uniformity between the two regions in regard to the settlement pattern over the periods leads to the potential presence of a broad settlement cycle in the Dhibān Plateau. This view is supported by Table 5 which presents the results of the survey by plotting number of sites according to chronological period. In this case, the Aliyyān-‘Ammūriya and the ar-Rāmah-as-Sāliya regions are plotted simultaneously. When Tables 1-5 are taken into account, marked similarity between the ar-Rāmah-as-Sāliya region and the Aliyyān-‘Ammūriya region becomes apparent. In both regions, settlement sites are distributed fairly unevenly from period to period with high representations in the of Roman and

Byzantine periods. An interesting point is that the data point to a gradual and continuous increase of settlement from Iron I to the Byzantine period, although the Persian period shows short-term decrease. This result posits that the settlement abatement in the Hellenistic period was not substantial in comparison to Iron II. We also note that the number of settlements for the ‘Aliyyān-‘Ammūriya region are lower than those for the ar-Rāmah-as-Sāliya region. This fact shows that the ar-Rāmah-as-Sāliyah region was more heavily utilized over time than the ‘Ammūriya-‘Aliyyān region. In general, however, the preceding observation is indicative of the existence of one settlement cycle through the ages in the Dhibān Plateau.

On the other hand, Figure 1 and Table 3 demonstrate that in the region of ar-Rāmah and as-Sāliya sites are strongly concentrated along the plateau rim which accounts for 122 of 152 sites (80.26%). This pattern sug-

**Table 5.** Stacked Bar Graph by Chronology in the Regions of ar-Rāmah-as-Sāliya and ‘Aliyyān-‘Ammūriya (N=209).



gests evidence for settlement locational preferences of the plateau rim to the central plain area. In conjunction with this suggestion, note that in the plateau rim region, 92 of 122 (75.41%) were small watch-tower sites overlooking the wadi. A comparison of site type for the plain region indicates a somewhat different occupational pattern: 23 of the 27 sites (85.19%) contain agricultural dams, water cisterns, or rock-cut features (e.g., cupholes and basins) without any adjacent architectural evidence. The ‘Aliyyān-‘Ammūriya region exhibits a similar pattern overall in regard to settlement distribution (see Table 4). The narrow band along the plateau rim contain 85.97% of the sites (49 of 57) occupied in antiquity, and 73.47% of these sites (36 of 49) are watch-tower sites. A unique feature of the ‘Aliyyān-‘Ammūriya region is the sparsity of agricultural dams and water cisterns in its neighboring plain area: only two water cistern sites were found in this area. This scarcity seems to be related with virtual absence of such major

wadi tributaries suitable to dry farming in the ‘Aliyyān-‘Ammūriya region as the Wādī al-Mamlah, the Wādī al-Manshala, and the Wādī Hinu Sāliya in the region of ar-Rāmah and as-Sāliya. At the same time, it should also be noted that watch-tower sites are conspicuously absent in the plain region.

Taken together, in the Dhibān Plateau, settlement sites are heavily concentrated along the plateau rim, and approximately 75% of these sites are associated with watch-tower-like structures. This sub-regional variability in site location should be considered an important variable for future field work and studies since it may be indicative of patterned subsistence strategies and settlement systems within the Dhibān Plateau.

**Major Sites in the ar-Rāmah-as-Sāliya Region**

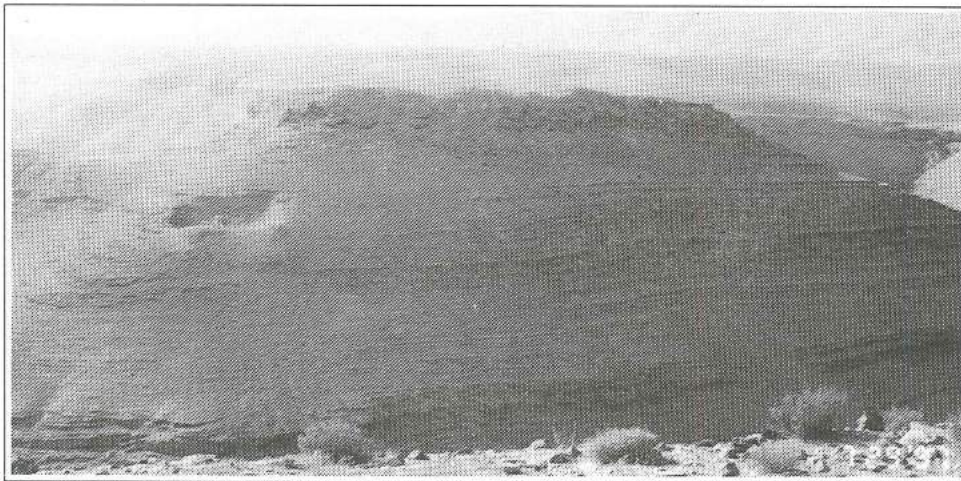
The ar-Rāmah-as-Sāliya region is situated on the southeastern edge of the Dhibān Plateau. It extends about 7 km from the

Wādī al-Mūjib to Umm ar-Raṣāṣ. This region includes many archaeological sites like Khirbat as-Sāliya (Site 3), Khirbat al-Mdayyneh as-Sāliya (Site 20), Khirbat ar-Rāmāh (Site 23), Khirbat al-Musayṭiba (Site 153), and Khirbat al-Jumayil (Site 4). The survey team visited Khirbat as-Sāliya in 1996 and collected many sherds dated to the Iron Age and the Nabataean period (Ji and 'Attiyat 1997). In 1997, the survey team revisited this site and collected more than 350 sherds including a large number of Iron II, Roman-Byzantine, and Islamic sherds. Several Nabataean painted sherds were also collected. The survey team revisited Khirbat al-Jumayil in 1997 as well and collected a large number of sherds. An important aim of the 1997 sherding was to look for Iron Age sherds, since the survey team failed to collect Iron Age sherds in 1996. The 1997 survey shows that at Khirbat al-Jumayil, Iron Age pottery is concentrated on the southern edge near the Wādī Hinu Sāliya, which is currently covered by modern roads, buildings, and olive groves. A suggestion is that during the Iron Age, Khirbat al-Jumayil was a small village located on the eastern bank of the Wādī Hinu Sāliya.

Since space limitations do not allow us to illustrate all the sites in detail, we present the results of our investigation of some important sites. Survey Site 18 (PG: 241.0/094.3) is a building ruin at the end of a promontory near the head of the Wādī as-

Sāliya, ca. 2.5 km southeast of Khirbat as-Sāliya. Although the building is filled with tumbled stones, wall lines indicate a single-room broad-house (ca. 4.0 x 8.0 m) of fine stone construction. The entrance is found on the east side of this building which is approached possibly by several steps. Noticeable is the oval shaped configuration of field walls on the south side of the building. The walls are barely visible at ground level, yet a careful investigation suggests that the building is possibly bounded by these walls, and its southeastern corner is connected to them. Like the building, the walls are constructed of fine stones of medium size and are two to three courses wide (ca. 1.0 m thick). A suggestion is that the building and the boundary walls were built according to an overall plan which resembles the Early Bronze temples at et-Tell and Yarmouth in Palestine (cf. Callaway 1972; Miroschedji 1988). This being the case, it is not improbable that Site 18 is an Early Bronze cultic site, and a few wall lines with small stones two to three courses high, found on the east edge of the promontory, may represent a boundary of a holy area. This site yielded one possible Early Bronze body sherd along with two flints.

Khirbat al-Mdayyneh as-Sāliya (PG: 240.3/092.2) is Survey Site 20 corresponding to Glueck's Survey Site 93 (Fig.4). This site is located on a conspicuous promontory at the junction of the Wādī



4. Khirbat al-Mdayyneh as-Sāliya (looking southeast).



as-Sāliya and the Wādī as-Sa'ādah, ca. 5.0 km southeast of Khirbat as-Sāliya. This site is one of six ruins in the region east of the Dead Sea, called locally by the name of Khirbat al-Mdayyneh (Miller 1989). At Khirbat al-Mdayyneh as-Sāliya, the remains of ancient buildings spread over the promontory, ca. 50 m (north-south) by 150 m (east-west), which is almost completely cut off from the mainland plateau, with steep sides all around except for a narrow land bridge on the eastern side.

Although at the first glance, ruins of buildings seemingly cover the entire site (Glueck 1934: 36), a careful investigation of the surface remains indicates most of the houses are oriented parallel to the edge of this site, while architectural evidence is absent at the center. There are no examples of four-room houses discernible on the surface such as have often been found at Khirbat al-Mdayyneh al-'Āliyya (Routledge 1995) and Khirbat al-Mdayyneh al-Mu'arajah (Olávarri 1983).

Situated on the northeastern side of this site is the stone tumble of a large building complex comprised of several small to large buildings, yet it is difficult to distinguish the exact plan of the buildings. One of the buildings appears to be rectangular in shape and measure 3.0 x 15.0 m. Immediately west of

this building is the remnant of another rectangular building which is smaller than the first one. To the west of this building complex are the ruins of a large building measuring 11 x 20 m. One interior wall which appears to bisect the building into two rooms is visible on the ground. Approximately midway between this building and the acropolis is a ruin which represents a single structure (ca. 4.3 x 4.7 m) built with medium- to large-sized dressed stones on three sides. The evidence of wall lines is absent on the south side of this structure. The structure could have been approached from the south side, possibly by a couple of steps.

On the highest point of Khirbat al-Mdayyneh as-Sāliya is a raised platform of masonry constructed of roughly cut, rectangular blocks of stone (Fig. 5). The inside seems to be filled up to the top with stones, and no doorway is evident. This structure provides a commanding view of the entire site and the surrounding region. Associated with this platform are two large rectangular cisterns or reservoirs. About 10.0 m southeast of the platform a first one is noted which measures 10.2 m by 18.0 m and about 6.0 m deep. Immediately west of the platform is another large, rectangular cistern which had already been badly disturbed when the survey team investigated. To the



5. Stone Platform at Khirbat al-Mdayyneh as-Sāliya (looking northwest).

south of the platform are two completely ruined rectangular-shaped structures with possible stairways leading down to the western cistern.

The southern side of Khirbat al-Mdayyneh as-Sāliya consists of a series of vague wall lines, probably remnants of a building complex, and a rectilinear enclosure wall covering an area of ca. 17.7 x 18.0 m. To the east of this site, occasional wall lines can be traced amid the rubble of field stones spread over an area ca. 10 x 15 m, which seems to represent a large, completely ruined structure.

We were unable to distinguish any surface evidence of fortification around the city. This observation stands in sharp contrast with Glueck's description (1934: 36); "El-Medeyineh was a large Nabataean acropolis, surrounded by a wall which was further strengthened by towers." Segments of the potential wall lines which may have been used for defence purpose are found in two areas. One of the two walls, found on the steep hillside immediately south of the rectilinear enclosed structure, is built of semi-hewn stone blocks possibly built along the southern rim of Khirbat al-Mdayyneh as-Sāliya, and up to some 1.0 m of the wall has survived. The other segment which is now eroded in many places is found on the western slope of this site, ca. 25.0 m west of the platform at the acropolis. Both wall lines seem to be contemporaneous and associated with each other in terms of their building blocks and construction technique. Noteworthy is the fact that both wall lines are situated below the ground level, and most of the Iron I and Iron II sherds which the survey team collected came from the western slope near the possible defence wall rather than in connection with the above-described buildings on the surface. This explains why the possible defence fortification wall may be dated to Iron I and Iron II, whereas Khirbat al-Mdayyneh as-Sāliya was an unfortified city in the Nabataean-Roman pe-

riod.

There are a number of large plastered cisterns on the eastern slope of Khirbat al-Mdayyneh as-Sāliya. The cisterns are rectangular in shape, measuring up to 7.0 m wide, 8.0 m high, and 28.0 m long. Quite a few number of caves are also associated with these cisterns.

At Khirbat al-Mdayyneh as-Sāliya, Glueck (1934: 36) found a large quantity of Nabataean and Roman pottery. We collected 497 sherds, including diagnostic Iron I, Iron II, Persian, Hellenistic, Nabataean, Roman, and Byzantine sherds. Hence, on the basis of the analysis of the pottery, Khirbat al-Mdayyneh as-Sāliya appears to date to the Iron I and Iron II, Hellenistic and Roman, and possibly Persian and Byzantine periods.

Khirbat ar-Rāmah (Survey Site 23; Glueck's Site 96; PG: 236.0/094.7) is situated about 4.5 km southeast of Khirbat al-Jumayil and about 3.5 km southwest of Khirbat as-Sāliya. It is on a natural hill spreading over an area approximately 150 x 150 m. A cluster of caves and cisterns on the eastern slope are enclosed by Ottoman and modern stone animal pens and field-walls. A high school is immediately at the foot of the eastern slope, and several modern graves are also noted on the western and northern slopes. Despite these modern structures and graves, however, considerable evidence of architecture remains visible on the site, especially on the summit and the northern slope. The summit, though destroyed by a modern animal pen, contains a rectangular tower or altar which measures about 3.6 x 4.3 m and still stands about 1.4 m high. Roughly centered on the northern part of this site are some impressive wall lines and corners of a large building complex, although its overall plan is difficult to determine. Walls indicate a cluster of buildings which covers an area of about 50 x 50 m (Fig.6).

At Khirbat ar-Rāmah, Glueck (1934: 38) collected a large number of Nabataean pot-



6. Potential Nabataean Buildings at Khirbat ar-Rāmah (looking north).

tery along with some pieces of sigillata ware; Parker (1986: 170) found Nabataean, Roman, and Byzantine sherds. The survey team collected about 410 sherds which included Hellenistic, Nabataean, Roman, Byzantine, Early Islamic, and mid-Islamic pottery along with five Iron II sherds.

Situated on the edge of a flat-topped promontory, Rujum Shu'ayb Oda'a (Survey Site 45; PG: 237.6/093.3) stretches over an area of 50 x 200 m. This site may represent the remains of a small village or a watch-tower spot. Rujum Shu'ayb Oda'a provides a clear view toward the Wādī al-Mūjib. Es-

pecially notable among the ruins are the remains of about 12 round or oval solidly built structures (Fig.7). Their diameters range from 2.6 to 6.2 m, and they are about 5 to 10 m apart. A rectilinear structure, measuring 10 x 100 m, is situated at the eastern extremity of this site and appears to have been recently used as an animal pen. This site has yielded only seven undiagnostic sherds along with five flints. The sherds are dated to the Roman and Byzantine periods.

Rujm Hilayla (Survey Site 56; PG: 237.7/092.3) is situated at the rim of a



7. A Watch-tower-like Structure at Rujum Shu'ayb Oda'a.

promontory which overlooks the Wādi al-Mūjib. Occupational remains are still evident over an area of 40 x 60 m. Five round watch tower-like structures stand out. They range from 4.0 to 5.3 m in diameter and presently stand up to 70 cm above the ground. They are all solidly made of small to medium rough stones. The distance between the structures varies, ranging from 3 m to 30 m. Some of these round structures have been disturbed and robbed for use in the modern Bedouin graves that dot this site. An impressive rectangular structure is located in the middle of this site (Fig.8). It measures 9.7 x 13.0 m and is preserved up to two to three courses high. It is solidly made up of medium to large stone blocks (ca. 0.3 x 0.6 x 1.1 m), and its external walls measure 1.5 m thick. Connected to this rectangular building are wall lines which may represent a recent small water reservoir measuring 10 x 40 m. No pottery was collected at this site.

Rujum Jama Maiat (Survey Site 90; PG: 235.4/092.3) is located near the end of a stretch of ground that protrudes to the southwest, providing a good view over the Wādi al-Mūjib. The area is rocky and unsuitable for farming and plowing. This site is represented by a round structure (ca. 3.5 m in diameter) surrounded by a rectilinear building

measuring 13.0 m (north-south) by 17.5 m (east-west). The circular structure is only one to two rows wide and is built of medium to large stones. The rectilinear structure is preserved up to 1.5 m above the ground, and its external walls are 1.0 m thick. The walls of this structure are constructed from medium to large limestone blocks. On the southeast side of this structure is an inner room which is possibly oval or rectilinear in shape. Seven sherds were collected including one potential Iron I and one Byzantine sherds.

Khirbat az-Zuqayba Umm Rakhm (Survey Site 100; PG: 235.7/091.9) is comprised of a number of architectural remains scattered over an area ca. 150 x 200 m. Located on the edge of a very pronounced promontory, most of the structures provide a clear view south toward the Wādi al-Mūjib and an overview of approaches from the wadi to the plateau. A first characteristic feature of this site is a cluster of three round structures exposed 1.2 m above the ground and solidly constructed of medium to large field stones (ca. 0.3 x 0.4 x 1.3 m). They measure 3.6 m, 4.1 m, and 5.2 m in diameter respectively. Some 40 m east of these structures is a line of architectural remains oriented in the roughly north-south direction along the eastern rim of the pro-



8. A Stone Structure at Rujum Hilayla (looking north).

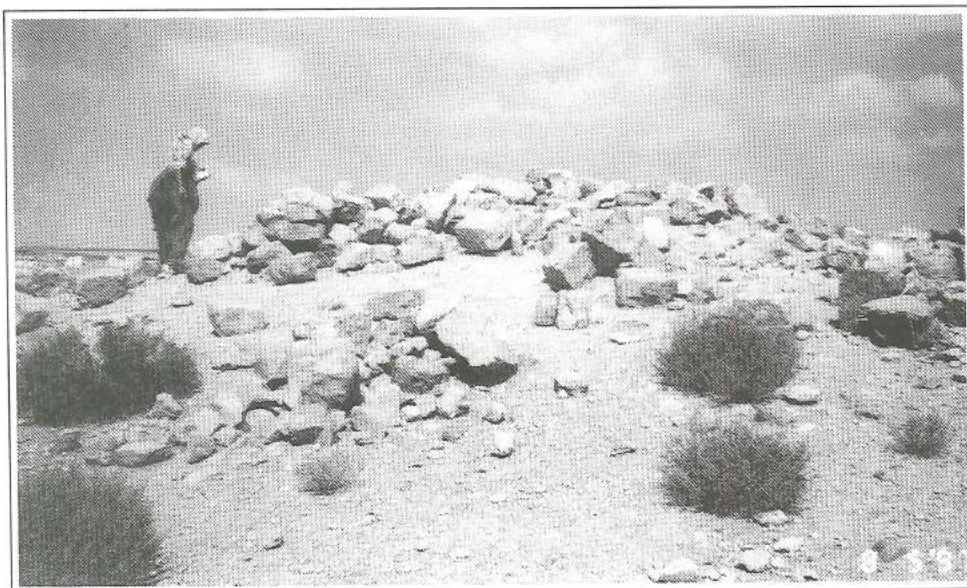
montory. The northernmost structure is a round watch tower measuring 4.6 m in diameter. Between this structure and the first three round structures is a wall line 6.0 m long and 1.0 m thick. It is oriented in the east-west direction. To the south of the preceding round structure are four buildings, two of which are rectangular in shape and the other two circular. The distance between the structures is not uniform, and they still stand up to 1.0 m high. The rectangular structures measure 6.1 x 7.3 m and 5.4 x 7.6 m; the two round ones are 4.5 m in diameter. All these structures are built of limestone blocks in medium to large sizes. At the center of this site is a water cistern which is not currently in use. To the east of this cistern are five building remains, four of which are circular in shape. The diameter of the four round structures, apparently watch-towers, ranges from 3.5 m to 6.0 m. A roughly square building (ca. 5.3 x 5.5 m) is noted associated with these round watch towers. On the west side of this site are four circular structures built along the rim of the promontory. These western watch towers measure 3.9 m to 6.7 m in diameter and stand up to 1.7 m above the ground. Like other structures at this site, they are made of medium to large limestone blocks and command an excellent view over the Wādī al-Mūjib. In comparison to the abundant architectural remains, pottery is quite sparse. This site yielded only 12 body sherds, most of which appear dated to the Roman and Byzantine periods.

It is possible that Qaṣr Almanqada'a (Survey Site 101; PG: 235.7/091.7) is an early Iron I fortress strategically situated on the edge of promontory overlooking the Wādī al-Mūjib. The ruin consists of foundation walls indicative of a single rectangular building measuring 11.4 x 20.0 m. The external walls, well preserved up to 2.5 m high, are neatly laid using medium and large limestone blocks. The external walls are 1.0 m thick. There are interior walls at the

northwest corner of the building, yet it is difficult to distinguish whether they compose an interior room or a stairway leading up to the second floor since collapsed stones cover the wall lines. The entrance appears to be located on the northeast side of this building, and the external walls are equipped with windows (about 40 x 65 cm). The survey team collected 135 sherds at this site including early Iron I and Roman pottery.

Situated on a knoll at the head of the Wādī as-Sāliya, Rujm ar-Rayna (Survey Site 121; PG: 240.6/096.5) overlooks the wadi to the south and Khirbat as-Sāliya to the southwest. Wall lines visible at ground level suggest a solidly-built, rectangular structure which measures 4.1 x 6.4 m (Fig.9). Since the center of the building is filled with tumbled stones, we were unable to identify a complete plan of the building. Yet, a small square chamber attached on the northern wall of this building can be made out. There is a small cairn measuring about 0.3 x 1.8 m to the south of this site, which seems to be a Bedouin grave. Approximately midway between the building and the potential grave is a cistern currently out of use. The survey team collected 214 sherds including Iron II, Roman, and Byzantine pottery. The majority of the nondescript sherds may be dated to either the Iron II or Roman-Byzantine periods.

Situated on the high point of a northwest-southeast ridge with valleys on either side, Khirbat aḍ-Ḍā'an (Survey Site 143; PG: 235.2/097.0) is a medium sized ruin (ca. 90 x 120 m) with numerous wall lines and a couple of caves. Khirbat ar-Rāmah is visible to the southeast. Clear outlines of structures are discernible in several places. At the acropolis of this site is an almost completely disturbed structure measuring approximately 5.3 x 8.0 m. East of the acropolis is a rectangular building with one partition wall, which measures 5.0 x 10.5 m. Both structures are still exposed about 70 cm above

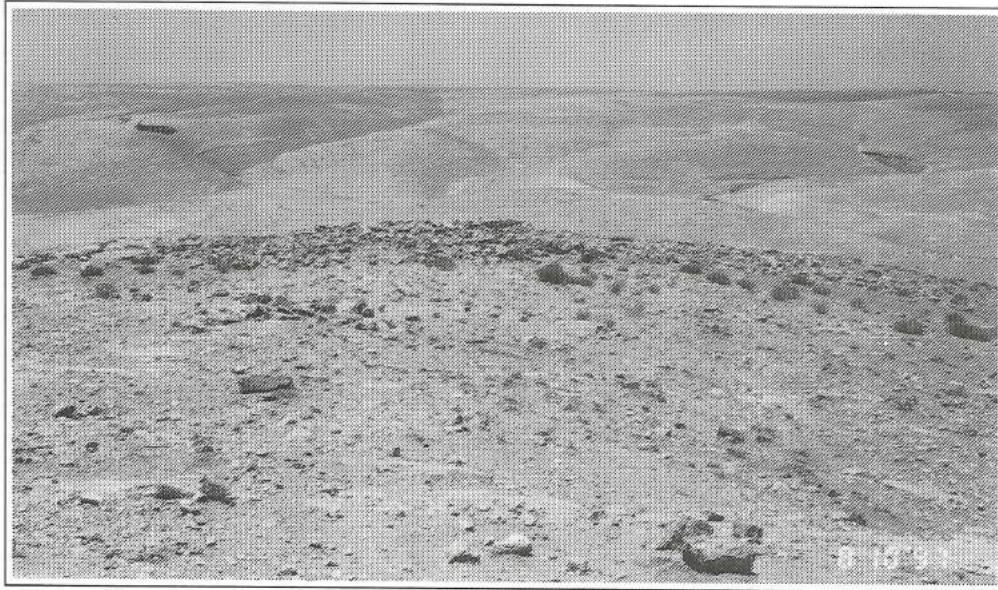


9. Rujum ar-Rayna (looking west).

the ground and made of medium to large rough stones. At the east end of this site is a massive tumble of stones which seems to be the remains of a potential, rectangular building (ca. 10.5 x 18.3 m). Immediately outside the western wall of this building is a wall line extending 3.3 m in the roughly east-west direction. At the center of this site, we note another massive rectilinear building complex divided into two major sections. The eastern section appears to consist of a couple of rectangular rooms and to cover an area of 17.0 x 17.0 m. The western section, characterized by a large courtyard-like room (ca. 11.4 x 14.0 m), covers an area ca. 22.0 x 24.0 m and still stands up to 1.5 m high. It is likely that the central building complex is a public building of some sort. There is a round structure, measuring 1.5 m in diameter, inside the western section of the central complex. Approximately 300 m northeast of Khirbat aḍ-Ḍā'an are a large, rectilinear enclosure and three massive terrace dams, presently in use as sheepfolds. Khirbat aḍ-Ḍā'an yielded 261 sherds, including Late Bronze II, early Iron I, Iron II, Iron II-Persian, Hellenistic, Roman, Byzantine, and Early Islamic sherds.

Khirbat al-Qrayya (Survey Site 149; PG: 234.8/096.4) is an unoccupied village site

on a ridge overlooking the head of the Wādi al-Mūjib and the Wādi al-Qaṭṭār, about 800 m west of the modern paved road from Khirbat ar-Rāmāh to Khirbat al-Jumayil (Fig.10). This site consists of a large building complex, a watch-tower, and at least six dwelling caves. The building complex is spread over an area of 50 x 50 m, and a large number of external and internal wall lines can be traced with confidence. The south quadrant of this complex is comprised of at least six rectilinear rooms; the north quadrant consists of six to seven rectilinear rooms as well. Immediately east of the northern quadrant is a large oval animal pen (ca. 13 x 15 m) built adjacent to a rectangular structure (ca. 5.6 x 8.3 m). Roughly centered on the west quadrant of this complex, foundation walls indicate two circular structures which measure about 3.0 m in diameter each. About 20 m east of this building complex is a rectangular building, probably a watch-tower, which measures 8.5 x 10.5 m. At Khirbat al-Qrayya all the structures are constructed from undressed stone blocks. Several caves are found in the west side of this site, which appear to have been used as dwellings. There are two cisterns in the vicinity of this site, one of which is still in use. The survey team collected 533 sherds, including Persian, Hel-

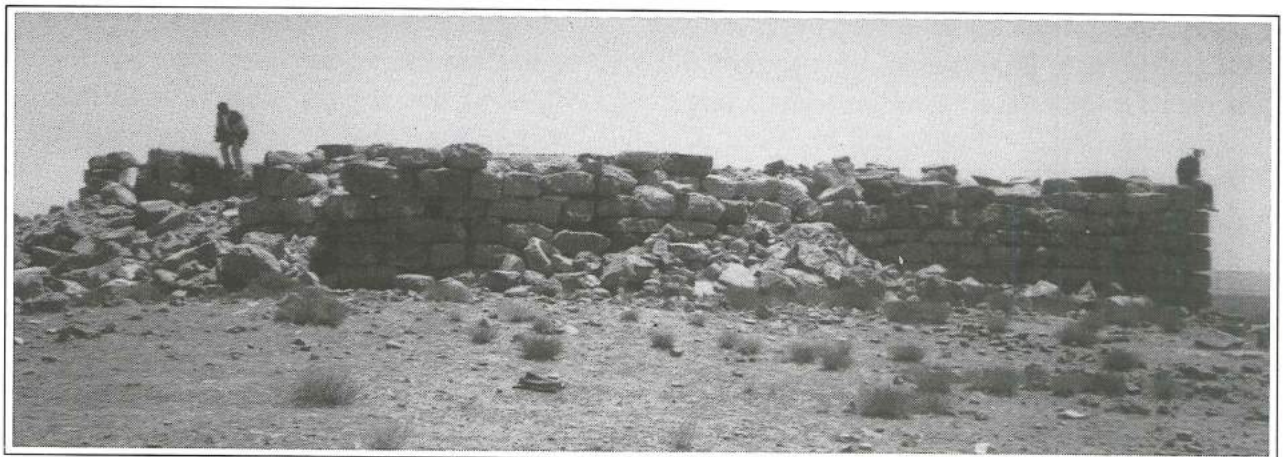


10. Khirbat al-Qrayya (looking northwest).

lenistic, Nabataean, Roman, Byzantine, and Early Islamic sherds.

Khirbat al-Musayṭiba (Survey Site 153; Glueck's Site 87; PG: 243.3/099.7) is a large settlement site ca. 6.5 km southeast of Umm ar-Raṣāṣ and immediately north of the modern road from Umm ar-Raṣāṣ to the Desert Highway. The most characteristic feature of this site is a roughly square structure which measures 20.0 x 21.3 m (Fig.11). The external walls are solidly constructed of roughly cut blocks of stones and still stands 3.3 m high. Glueck (1934: 40) described it as "a raised platform of masonry" with "two flights of broad steps, one each on the northern and southern sides, leading to the top of the platform". The stairs which Glueck des-

cribed appear to have been largely obliterated by the modern settlers, yet the stone tumbles on the northern and southern sides of this structure still bear some evidence of stairs. Glueck closely investigated this structure and discovered inner vaulted chambers, which led to the suggestion that this structure was a Nabataean cultic platform. Adjacent to this square structure is a large building complex comprised of a large number of wall lines and chambers. In the middle of this building complex is a large possible courtyard measuring some 30.0 x 35.0 m. This building complex seems to have been used for public and military purposes in antiquity, since it is solidly built according to an overall plan. Not much can be



11. The Main Structure at Khirbat al-Musayṭiba (looking southeast).

made of the details of this complex because parts of this structure have been badly disturbed and removed for use in the modern village nearby. In addition, we see some possible wall lines along the east side of the main square structure.

Approximately 70 m northeast of this square building is a large rectangular water reservoir with steps inside leading down from its northwest corner. This reservoir measures 13.0 x 24.0 m and was dug into bedrock 6.3 m deep. The inner walls and steps of this reservoir are plastered with clay cement and contain large numbers of ancient pottery sherds. We note the immediate surrounding terrain of this reservoir essentially as Glueck (1934: 42) described it: the reservoir is "surrounded on the outside by mounds of earth...which deflect the rain-water into it." At the southeast corner of this reservoir is a water channel leading to an opening in the wall through which the water runs into it. To the west and east of this reservoir are three water cisterns presently in use. There is another water reservoir about 150 m east of the first reservoir. This second reservoir is currently in use, and its inner walls are cemented using modern cement. Two additional water cisterns are recognized in the immediate vicinity of the second reservoir.

Located about 130 m east of the main square structure is a single structure (ca. 3.0 x 4.0 m) with roughly hewn limestone blocks. It is presently preserved up to only one course high. In this area, we also note a couple of additional foundation walls along with a stone heap. Some 100 m south of this small building is another completely ruined building with wall lines representing a rectangular building with a cluster of inner chambers. The overall dimensions of this building are ca. 4.0 x 17.0 m, including at least four rooms. Additional wall lines are easily discernible on the west and south sides of this building.

Glueck (1934: 41) collected a considerable

number of Nabataean sherds and pieces of sigillata at Khirbat al-Musayṭiba. Parker (1986: 170) also visited this site and found Iron I, Nabataean, Roman, Byzantine, and Early Islamic pottery sherds. The Dhibān Plateau survey team collected 386 sherds, including Late Bronze II, Iron I, Hellenistic, Nabataean, Roman, Byzantine, Early Islamic, and mid-Islamic pottery. Hence, the earliest occupation of Khirbat al-Musayṭiba seems to go back to Late Bronze II and Iron I, and it was reused at least three times after a potential long occupation gap in the Iron II and Persian periods.

### Major Sites in the 'Aliyyān-'Ammūriya Region

During the second half of the 1997 season, the survey team visited 'Aliyyān-'Ammūriya region which is marked by the Wādī al-Wāla in the north, the Wādī 'Ammūriya and the Wādī Umm az-Zabayia in the west, and the modern road from Nitil to Umm ar-Raṣāṣ in the east. This region includes Khirbat 'Aliyyān (Site 6) and Khirbat ar-Rumayl (Site 11), both of which were visited by the survey team in 1996 (Ji and 'Attiyat 1997). As stated above, in this region, the survey team has so far discovered 53 new archaeological sites. Most of these new sites are small watch-tower-like remains located along the Wādī al-Wāla, the Wādī 'Ammūriya, the Wādī al-Kaum, and the Wādī al-Buṭum, and in the flat lands between these wadis. Yet, not a small number of ancient cities are also located in this region, which shows that this region was more or less densely settled in ancient times. Examples are Umm ash-Shujayrāt ash-Shiyāb (Site 162), Khirbat al-Qahqaha (Site 166), Khirbat al-Kaum (Site 172), Khirbat 'Ammūriya (Site 186), and Umm ash-Shujayra al-Gharbiyya (Site 214).

Located on a high flat-topped spur overlooking the Wādī al-Buṭum, Khirbat Umm ash-Shujayrāt ash-Shiyāb (Survey Site 162; Glueck's Site 154; PG: 232.9/100.1) com-



mands a good view over the surrounding terrain and provides excellent visibility of Khirbat 'Aliyyān. This ruin is located some 1.0 km northwest of Khirbat 'Aliyyān and stretches over an area ca. 40 x 50 m. The ancient wall lines can be traced only partially today since local inhabitants have been robbing stones from the ancient buildings to the extent that only traces of possible wall lines survive. A characteristic feature of this site is a partitioned rectangular structure which covers over the area of ca. 5.8 x 19.4 m. Its external walls average about 60 cm thick and solidly built using roughly dressed limestone blocks. Portions of the external walls have survived up to 1.5 m high. This building is oriented in the northwest-southeast direction and occupies the highest point of this site. In the middle of this building is a Buṭum tree that Glueck (1939: 115) mentioned as "a landmark for a distance of many kilometers." Ruin of another building complex (ca. 13 x 15 m) are visible immediately west of the northwest corner of the first one. This structure rests on bedrock and includes at least three to four rooms. Also notable are possible remains of wall lines on the southern side of this site where the hill begins to drop precipitously into the Wādī al-Buṭum. There is a large collapsed cave or cistern (ca. 4.0 x 5.0 x 8.0

m) near the wall lines. Ancient remains are virtually non-existent on the east and west side of this site, and they appear to have been completely obscured by the modern structures. At Umm ash-Shujayrāt ash-Shiyāb, Glueck (1939: 115) picked up a few Nabataean sherds along with Islamic sherds. Although the ruins were scanty, the survey team collected 263 sherds at this site, including diagnostic Iron II, Nabataean, Roman, Byzantine, and early Islamic sherds.

Khirbat al-Qahqaha (Survey Site 166; Glueck's Site 161; PG: 232.3/104.2) is situated near the head of the Wādī al-Qahqah that feeds into the Wādī al-Buṭum, ca. 2.0 km southwest of Khirbat 'Aliyan and some 2.2 km northeast of Khirbat Umm ash-Shujayra al-Gharbiyya. The Wādī al-Qahqaha cuts around most of the spur where the ruin is situated, leaving the west side connected to the plateau. This site covers an area some 120 m by 140 m.

Glueck (1939: 116) visited Khirbat al-Qahqaha and reported it as "a fairly extensive ruin" without providing any details on the architectural remains. Yet, we observed numerous building remains, several caves, and water cisterns that constitute Khirbat al-Qahqaha (Fig.12). Situated on a high point in the center of this site are two structures solidly made of small to medium



12. Ancient Remains at Khirbat al-Qahqaha (looking southwest).

limestone blocks. One measures 4.4 x 6.0 m and the other 2.5 x 3.0 m. The external walls of both structures measure 80 cm thick and still stand 60 cm high. Approximately 50 m northeast of these two structures are three cisterns cut into bedrock, two of which are currently in use. The cisterns are large and well-cut each other with an opening ca. 57 cm in diameter.

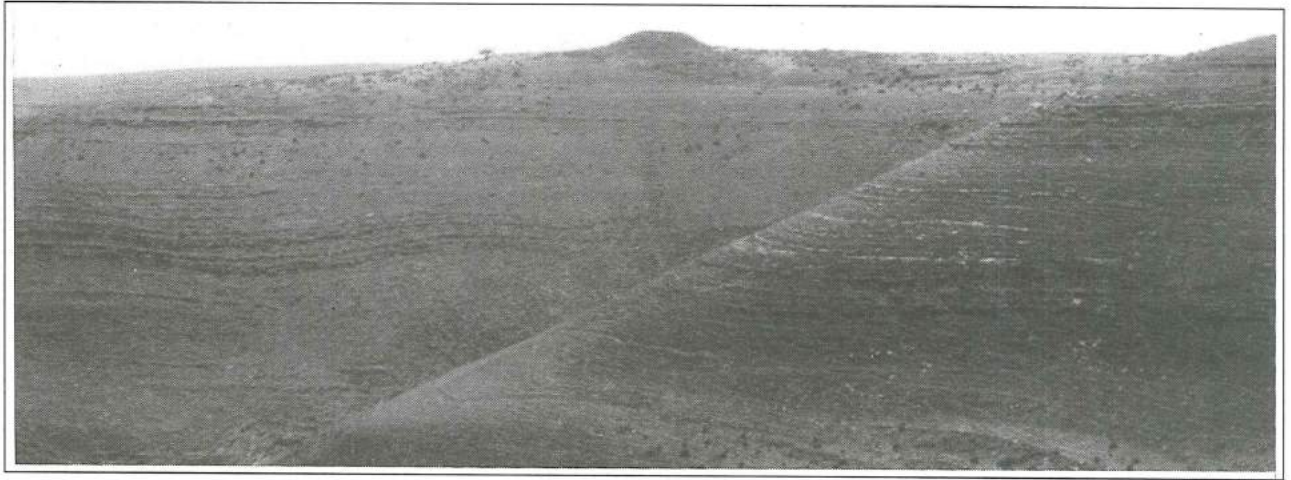
Along the slopes on the eastern side of Khirbat al-Qahqaha are the wall remains of solidly built structures, probably a residential area, which cover an area ca. 50 x 50 m. In this area at least three building complexes were noted. Situated about 20 m south of the three cisterns is a large building which measures some 10.0 x 10.0 m overall and is divided into three to four chambers. Another building complex is observed some 20 m southeast from the first one. The vague outlines of several houses and chambers are discernible in this complex. The external walls measure 0.8 m to 1.2 m thick, and parts of the buildings have survived up to 90 cm above ground level. Approximately midway between the first and second building complexes are three natural caves which may have been used for dwellings and storage in antiquity. There are potential man-made terraces on the eastern slope of this site, ca. 10 m east of the second building complex. The heaviest concentration of building ruins are noted on the southeastern side of Khirbat al-Qahqaha. Although the whole complex covers an area ca. 40 x 50 m, only part of wall lines can be traced with any degree of certainty. We identify more than 10 chambers and numerous foundation walls. In this area the buildings are constructed of large dressed stone blocks, which stands in contrast to the two structures in the center of this site. Also notable are water cisterns and caves dotted inside and outside of this building complex: the survey team recorded five water cisterns all currently out of use plus three natural caves. The cisterns were cut into deep bedrock,

each with openings ca. 1.0 m in diameter.

The building ruin approximately 20 m west of the third building complex deserves our attention, since it is the best preserved and well-built structure at Khirbat al-Qahqaha. The whole building measures ca. 3.3 x 5.0 m with external walls about 1.3 m thick. It is built of medium boulders using head-stretcher building technique and still remains standing up to six courses high in some places. A possible entrance was noted on the north side of this building. The overall plan of this building shows that a rectangular room runs across the front and three long rooms stem forward from it. The main entrance leads into the front rectangular room.

Glueck (1939: 116) collected some Nabataean sherds along with several pieces of sigillata and Middle Islamic painted sherds at this site. We collected 663 sherds including diagnostic Hellenistic, Nabataean, Roman, Byzantine, Early Islamic, and mid-Islamic sherds. The predominant pottery was Middle Islamic. Hence, Khirbat al-Qahqaha appears to have been a place of importance during the period from the Hellenistic to Middle Islamic periods, particularly during the Middle Islamic period.

Khirbat al-Kaum (Survey Site 172; Glueck's Site 174; PG: 230.6/107.0) is situated on a spur surrounded almost completely by a loop in the Wādī al-Kaum except for the south where the spur joins a plateau (Fig.13). The site provides broad visibility: for example, al-Ḥashāsh (Site 215) is visible about 1.2 km directly to the north and Khirbat 'Ammūriya some 2.0 km to the northwest. On this large site, the debris spreads over an area of ca. 100 x 200 m. The main feature of this site is a rectangular structure, probably a fortress, which occupies the acropolis of this site. It measures 18.9 x 21.5 m and is oriented north and south. The structure presently remains standing up to 3.5 m, and its external walls are 1.0 m thick. The building itself is relatively well pre-



13. Khirbat al-Kaum (looking east).

served, although its southern wall has been disturbed. Immediately northeast of this building are the collapsed remains of a building which measures some 15.0 x 17.0 m. It consists of one large inner chamber (ca. 10.0 x 15.0 m) and two smaller inner chambers (ca. 2.8 x 7.5 m and 7.5 x 12.0 m). This building still stands up to 2.5 m, and its external walls are 1.4 m thick. It appears to have been used for residence. This large building appears to have been connected to the fortress by a rectangular structure measuring 9.0 x 12.0 m. Some 30 m west of the fortress are numerous foundation walls which indicate a solidly built building complex composed of at least eight to 10 chambers, although its overall plan cannot be traced completely. There are two cisterns and a cave in the midst of this building complex. The north and east terraces of this site contain numerous wall lines, foundations of ancient buildings, cisterns, and caves. In these areas, it is almost impossible to differentiate ancient structures from modern ones, since the stones of ancient remains have been taken for the construction of modern animal pens and houses, and the ancient ruins thus have practically disappeared. In this area, the survey team identified at least seven cisterns and caves, each associated with the buildings and wall lines.

Glueck (1939: 123) noted that the pottery

found on the east and north slopes below the fortress were dated predominantly to the Iron Age. Glueck's observation appears to be accurate. According to our survey, there is an exceptionally high concentration of Iron Age and Hellenistic sherds collected on the eastern slope of Khirbat al-Kaum. In contrast, Roman, Byzantine, and Islamic sherds are predominant on the western slope and northern terrace. Glueck suggested that in the Iron Age the fortress was possibly built and strengthened, and a glacis was built against its sides. According to his report, parts of this glacis was visible when he visited Khirbat al-Kaum. Yet, in 1997, we were unable to distinguish clear evidence of ancient glacis. In addition, Glueck collected a large quantity of Nabataean and Roman pottery. We also collected a large number of Nabataean, Roman, and Islamic sherds at this site, particularly on the western slope and northern terrace. In summary, at Khirbat al-Kaum the survey team found 525 sherds including Early Bronze, Iron II, Iron II-Persian, Hellenistic, Roman, Byzantine, Early Islamic, and Middle Islamic pottery.

Khirbat 'Ammūriya (Survey Site 186; Glueck's Site 173; PG: 228.4/107.7) provides a good vantage point from which to view almost the entire length of the Wādī 'Ammūriya. To the southeast Khirbat al-Kaum is clearly visible from this site. Khirbat 'Ammūriya is marked by many ruined

block-houses and enclosure walls, some of which are currently in use for animals. As Glueck (1939: 123-24) noted, however, there is a large number of wall lines spread over the area of ca. 100 x 100 m in addition to a couple of cisterns and caves. The flint block foundation wall lines on the flat top of this site indicates a large building complex including a relatively well-preserved building measured at 6.0 x 6.0 m. The external walls of this building are 1.0 m thick and are preserved up to 1.2 m above the ground. The main building appears to be a watch tower connected with at least three to four structures. There are other building remains west of the acropolis, one of which extends over an area of 15.0 x 18.3 m and the other one 10.0 x 14.8 m. The ruin of a building comprised of arches, possibly remains of a church, has been found almost completely covered by soil on the western terrace. There are a couple of cisterns and caves scattered in the vicinity of this ancient ruin. Glueck found a large number of Nabataean sherds along with some sigillata fragments. The survey team collected 286 sherds including Early Bronze, Hellenistic, Nabataean, Roman, Byzantine, Early Islamic, and Middle Islamic sherds.

Site 194 (PG: 227.9/108.3), a large watch-tower site, consists of at least seven circular structures on top of a high hill situated about 800 m east of the confluence of the Wādī 'Ammūriya with the Wādī al-Wāla. This site provides a strategic vantage point from which to view the surrounding area, and Mulayḥ is visible to the north. This site covers an area of 100 x 200 m. A first structure, about 3.0 m in diameter, is situated at the southeast end of the hilltop. Immediately northwest of this structure is another round structure measuring about 3.3 m in diameter. Both structures are solidly built with walls about 1.2 m thick. They presently stand about 80 cm above the ground and include a rectangular inner room (ca. 0.8 x 1.2 m). About 30 m northwest from

the two structures is a third tower 2.5 m in diameter, which is now partly destroyed. The next two structures are located some 30 m northwest from the third one, and they are 2.5 m and 6.0 m in diameter respectively. Their walls are 60 to 80 cm thick and remain standing about 70 cm high. Another ruin is noted some 10 m northwest of these structures, which measures about 3.5 m in diameter. This structure presently stands 50 cm above the ground. To the east of these six structures and clearly visible from the last three towers is a round structure built on the edge of the hilltop overlooking the bend of the Wādī al-Wāla. It is 4.7 m in diameter and is still preserved up to 70 cm high. Sherds were extremely sparse at this site; only two possible Roman or Byzantine body sherds were collected.

Tor al-Hashāsh (Site 203; PG: 230.7/108.6) is located close to the bottom of the Wādī al-Wāla, immediately across the wadi from the village of al-Ḥashāsh (Site 215). It is almost completely surrounded by a loop in the Wādī al-Wāla, where a group of cliffs jutting up from the wadi. The ruin consists of a large building complex which appears to have been a villa or a way station. The complex measures some 14.0 x 17.5 m, and is partitioned by several cross walls into five chambers and a rectangular courtyard (ca. 19.0 x 22.0 m). An oval circle of stones attached to the courtyard could be interpreted as used for animals. This seems also to be the case for another oval circle of stones noted on south side of the main building. The main building complex remains standing two to three courses high (ca. 1.0 m). Near the southeast corner of this building is a circular structure measuring 4.4 m in diameter. Fifty-one undiagnostic sherds were collected, including one potential Early Islamic sherd. The predominant sherds at this site appears to belong to the Byzantine or Early Islamic periods.

Khirbat Umm ash-Shujayra al-Gharbiyya

(Survey Site 214; Glueck's Site 159; PG: 230.3/103.2) is situated in an intensively cultivated plateau, approximately midway between Qaryat Flāḥa and Khirbat al-Qahqaha. The most characteristic feature of this site are abandoned Ottoman period houses built on top of earlier remains. Glueck (1939: 116) described this site as "a small modern settlement...consisting of a dozen houses, built partly out of the stones of the ruined site they supplanted." Ancient building ruins and foundation walls, however, are still clearly visible under the Ottoman building ruins, over an area of some 50 x 60 m. The ancient settlement is surrounded on the east, south, and west by modern paved roads and buildings.

Although the plan is not entirely clear, there seems to have been a large building complex (ca. 35 x 35 m), comprised of numerous partition walls and small chambers, on the north side of this site. On the south side of Khirbat Umm ash-Shujayra al-Gharbiyya is another building complex made of finely dressed blocks, spreading over an area of some 12 x 25 m. This building seems to have been composed of five to six rectangular rooms. Immediately west of this second complex are additional large building remains and foundation walls which covers an area ca. 20 x 45 m. This building complex is almost completely covered up by the later Ottoman building, yet part of earlier wall lines are still clearly discernable. It is very likely that these three building complexes were originally connected to each other and formed a huge villa or building complex. We are unable to distinguish any fortification walls. Approximately 50 m west of this building complex is another evidence of ancient settlement which is scattered over an area of 20 x 30 m. In this area, we note one cave, a rectangular enclosure animal pen (ca. 2.0 x 8.0 m), and the ruin of a stone-made structure. There are also two water cisterns at the western end of this area.

At Khirbat Umm ash-Shujayra al-Gharbiyya, Glueck (1939: 117) collected a few Nabataean-Roman sherds along with some glazed mid-Islamic sherds. Our investigation produced 404 sherds including Roman, Byzantine, Early Islamic, and mid-Islamic sherds.

### Conclusion

According to the 1997 survey, the ar-Rāmah-as-Sāliya region appears to have been densely settled in the Hellenistic, Nabataean, Roman, and Byzantine periods. There is evidence of settlement continuity throughout these periods. Of the other periods, the Early Bronze, Iron I and II, and Islamic periods seem to have more than a token representation, whereas the Middle Bronze, Late Bronze, and Persian periods are virtually unrepresented. In general, we observe a chronological correlation between the results of the survey in the ar-Rāmah-as-Sāliya region and those in the 'Aliyyān-'Ammūriya region. In the 'Aliyyān-'Ammūriya region, the majority of the 57 sites surveyed so far are attributed to the Iron II, Hellenistic, Roman, Byzantine, and Islamic periods. Yet, although well attested to at Khirbat 'Aliyyān and Khirbat ar-Rumayl (Ji and 'Attiyat 1997), Iron I appears to have witnessed a more or less low settlement intensification in the 'Aliyyān-'Ammūriya region in comparison to the ar-Rāmah-as-Sāliya region. The evidence of Early Bronze is also sparser in the 'Aliyyān-'Ammūriya region than in the ar-Rāmah-as-Sāliya region. Middle Bronze and Late Bronze pottery is almost completely absent in this region.

The geographical distribution of ancient sites also deserves some attention. Most of watch-tower sites and villages are situated along the southern and northern edge of the plateau, and they are often located in close proximity to each other. In contrast, they are surprisingly sparse in the central plateau bounded by Khirbat as-Sāliya and Khirbat

ar-Rāmāh in the south, Khirbat al-Musayṭiba in the east, and Khirbat 'Aliyyān and Khirbat al-Qahqaha in the north. Therefore, what is apparent is that in the ancient times, especially in the Iron Age and the Hellenistic-Byzantine periods, the Dhibān Plateau was encircled by a chain of watch-tower like settlements found in groups along the plateau rim. It is doubtful that these watch-tower settlements should be referred to as military and wayside stations since there are too many of them within a short distance of each other. On the other hand, urban centers are spread over the entire region and seem to have been built along ancient roads. It would appear, therefore, that road systems played a significant role in shaping the urban settlement pattern in the Dhibān Plateau. A suggestion is that the preceding settlement pattern of the Dhibān Plateau was related to a variety of factors, rather than military defence alone, including nomadic economy, unequal social structure, climate, water, tribal system, and transportation.

Taken together, the 1997 season of the Dhibān plateau project appears to have been successful and productive. The results of the 1997 survey show that in the Dhibān Plateau, there are still a large number of archaeological sites which await further fieldwork and careful follow-up analysis. In addition, the Dhibān Plateau seems to have a unique settlement pattern and occupational history, one somewhat different from the Mādabā plains in the north and the al-Karak

Plateau in the south. At least a couple of seasons of full-blown archaeological fieldworks appear to be necessary to complete the survey in the Dhibān Plateau.

#### **Acknowledgement**

The authors are most grateful for the permission and encouragement granted by the Director-General, Dr Ghazi Bisheh, and his staff at the Department of Antiquities to survey and investigate the Dhibān Plateau. Nuha Karadsheh and her friends at Mādabā also played an important role in the 1997 project by providing comfortable lodging and good food for the survey team. We are particularly grateful for their hospitality and friendship. The Dhibān Plateau Project is also deeply indebted to Dr Lawrence T. Geraty at La Sierra University and Dr Kye-Hoon Shin at Korean Sam Yook University for their encouragement and financial support. In addition, needless to say, without the generous financial support from a number of individual donors, the project would have been impossible. The authors wish to thank the donors for their help.

Chang-Ho C. Ji  
La Sierra University  
Riverside, CA 92515  
USA

Jong-Keun Lee  
Korean Sam Yook University  
Seoul, Korea

**Bibliography**

- Callaway, J. A.  
1972 *The Early Bronze Age Sanctuary at Ai (et-Tell)*. London: Quartich.
- Glueck, N.  
1934 *Explorations in Eastern Palestine I*. AASOR 14. New Haven: ASOR.  
1939 *Explorations in Eastern Palestine III*. AASOR 18-19. New Haven: ASOR.
- Herr, L. G. and Christopherson, G.  
1996 *The Madaba Plains Project Survey Manual*. Berrien Springs: Andrews University.
- Ji, C. C.  
1996 Archaeological Survey of the Dhibān Plateau. *AJA* 101: 499-500.
- Ji, C. C. and 'Attiyat, T.  
1997 The Reconnaissance Survey of the Dhibān Plateau, 1996. *ADAJ* 41:115-28.
- Miller, J. M.  
1989 Six Khirbet el-Medeinehs in the Region east of the Dead Sea. *BASOR* 276: 25-28.
- de Miroschedji, P.  
1988 *Yarmouth I*. Paris: Editions Recherche sur les Civilisations.
- Olávarri, E.  
1983 La campagne de fouilles 1982 à Khirbet Medeinet al-Mu'arradjeh près de Smakieh (Kerak). *ADAJ* 27: 165-78.
- Parker, S. T.  
1986 *Romans and Saracens: A History of the Arabian Frontier*. Winona Lake: Eisenbrauns.
- Routledge, P.  
1995 Pillared Buildings in Iron Age Moab. *BA* 58:236.