

A PRELIMINARY REPORT ON THE DHĪBĀN PLATEAU SURVEY PROJECT, 1999: THE VERSACARE EXPEDITION

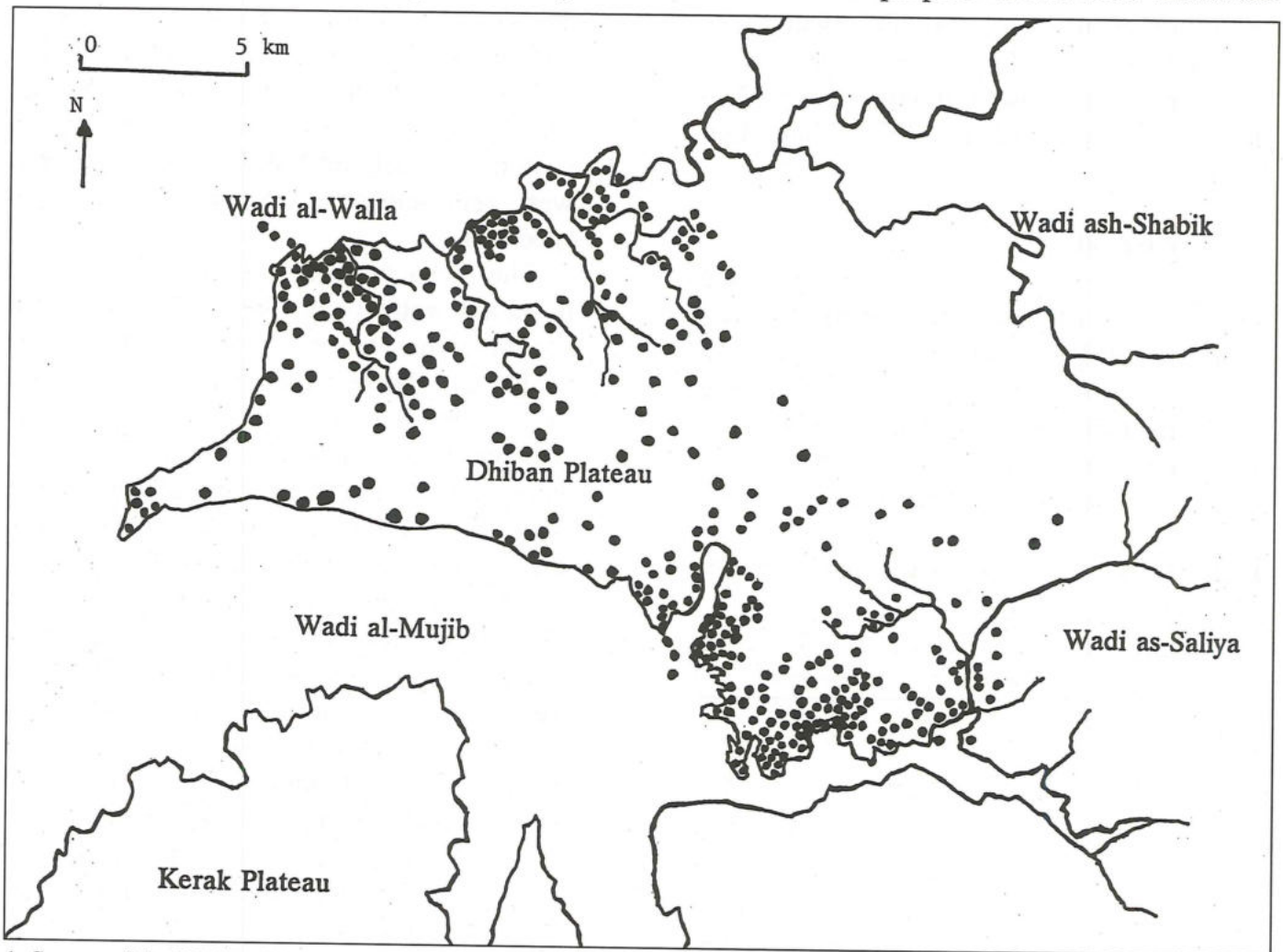
by

Chang-Ho C. Ji and Jong Keun Lee

The third season of the archaeological survey in the Dhibān Plateau was conducted for five weeks in July and August, 1999 (Fig. 1). In the first half part of the fieldwork, the survey concentrated on the area between Khirbat al-Jumayil and the modern King's Highway; in the second half, it concentrated on the area west of the highway. Accordingly, topographically, the survey area is delimited on the west by Sayl Haydan, on the north by Wādī al-Wāla, and on the south by Wādī al-Mūjib. Although the region's east limit is less clearly defined by

topographical features, it is generally demarcated by a modern dirt road from Ru-jaym Salim to Khirbat al-Jumayil. In consequence, in 1999, the survey team covered approximately the western half of the Dhibān Plateau. The survey was directed by the authors, and the team consisted of Benjamin Porter, Jaeil Park, and Daehwan Kim. Ahmed M. Ajaj participated in the survey as the Department's representative, and provided valuable consultations and support for the project.

The main purpose of the 1999 fieldwork



1. Survey of the Dhibān Plateau and Archaeological Sites Surveyed in 1996-1999.

was to examine and corroborate the results of the previous surveys in the Dhibān Plateau, and to compare the settlement pattern and occupational history of the western Dhibān Plateau with those of the eastern region. To these ends, like previous fieldwork, the survey team attempted to locate new archaeological sites in the study area and to revisit Glueck's sites in order to re-examine his dating of each site (cf. Glueck 1934; 1939). The main effort centered on the collection of pottery and artifacts at each site. The survey team recorded all visible features and made sketch maps of each site visited. Off-site features were also located and documented. *The Madaba Plains Project Survey Manual* designed by Larry Herr and Gary Christopherson (1996) was continuously used as the main guide for data collection and survey. Those who are interested in the survey method and research design in further detail may refer to the reports for the previous seasons and the survey manual (cf. Ji and 'Attiyat 1997; Ji and Lee 1998).

Survey Results

Within the area surveyed in 1999, the project team visited and documented 206 ancient sites (Table 1). When added to the 215 sites visited in 1996 and 1997, these bring the Dhibān Plateau survey site total to 421. To summarize the 1999 survey results, sherds of the Early Bronze period were

Table 1. Dhibān Plateau Archaeological Sites by Period.

Period	1999		1996-1999	
	Frequency	%	Frequency	%
Chalcolithic/Early Bronze	10	4.85	35	8.31
Middle Bronze	0	0.00	0	0.00
Late Bronze	4	1.94	10	2.38
Iron I	6	2.91	19	4.51
Iron II	25	12.14	53	12.59
Persian	5	2.43	13	3.09
Hellenistic	48	23.30	78	18.53
Roman	55	26.70	110	26.13
Byzantine	78	37.86	153	36.34
Early Islamic	38	18.45	60	14.25
Middle Islamic	30	14.56	47	11.17
Total	206		421	

found at ten of the 206 sites, and the Late Bronze period was represented at four sites. No diagnostic Middle Bronze pottery was collected, although some possible body sherds were sporadically present in the survey area. The population seems to have slightly increased during Iron I (six sites) and reached a high point during the Iron II/Persian period. Note that Iron II/Persian pottery was collected at 25 sites, or 12.14% of the sites explored. After a decline during the late Persian period (five sites), the population seems to have rebounded in the Hellenistic period to a higher level than during the Iron II/Persian period. The Roman period saw a continuation of this occupational increase, which reached its apex during the Byzantine period. Hellenistic and Roman sherds were present at 48 and 55 sites respectively, whereas Byzantine sherds were collected at 78 sites. Related to the Hellenistic and Roman periods is the collection of Nabataean painted palace ware at 13 sites. The Islamic period witnessed a decline in settlement: Early and Middle Islamic sherds were represented at 38 and 30 sites, respectively.

The archaeological sites were dominated by small watchtower-like structures, which accounted for 56.80% of the site total of 206 (Table 2). There were 18 cities or villages in the 1999 survey area. Thirty-five of the 206 sites were classified as farmstead buildings or villas, and the 32 agricultural feature sites, which included cisterns, dams, terrace walls, and cup-holes, almost equaled the number of farmstead buildings and villas. The survey team also discovered three pottery and flint scatter sites and one road site. Regarding the site location, 185 sites (89.81%) are situated in the plateau rim area, which is defined as the 2 km band along the edge of the Dhibān Plateau (Table 3). In sharp contrast to the rim, the central plain area contains only 21 sites. That is, archaeological sites are almost nine times as common along the plateau rim as in the

Table2. Dhibān Plateau Archaeological Sites by Type, 1999.

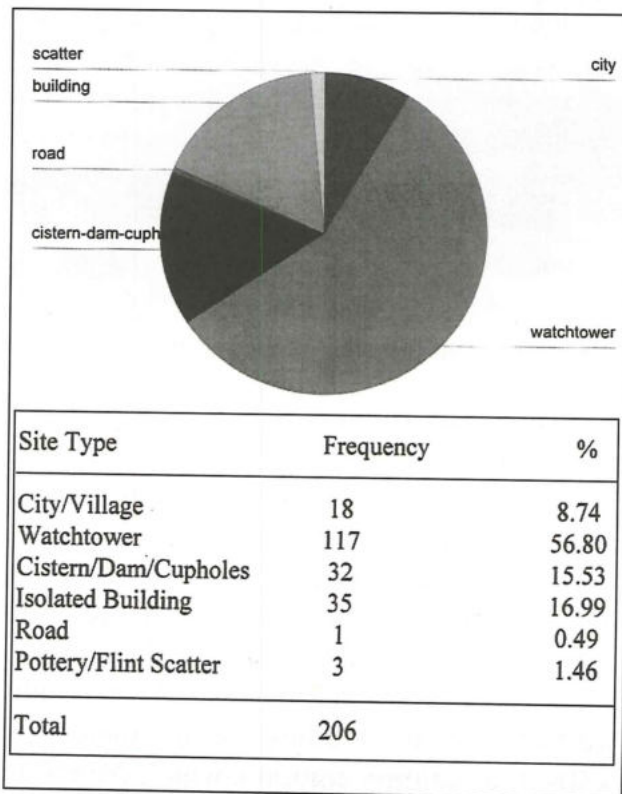
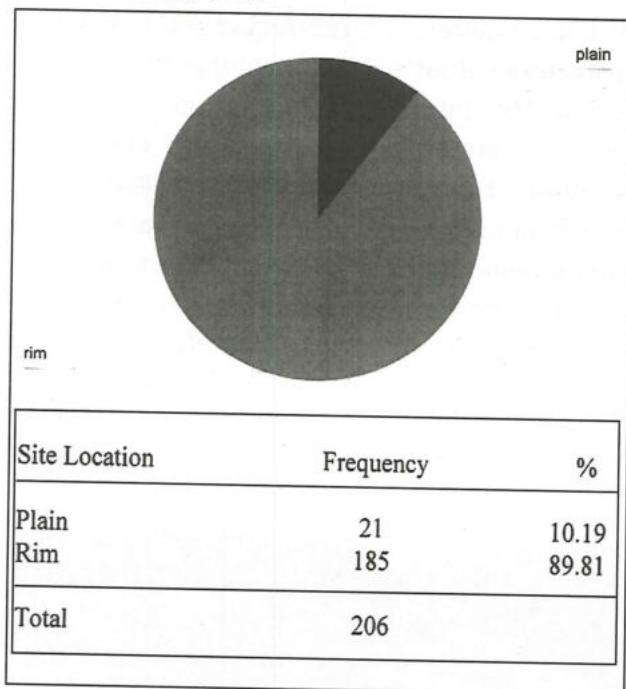


Table3. Dhibān Plateau Archaeological Sites by Location, 1999.



plain region. This fact shows that archaeological sites are distributed predominantly in the 2 km narrow band around the plateau, but only a few sites occur in the central plain area, thus confirming the bi-

modal site distribution reported in the previous report (Ji and Lee 1998).

Accordingly, the 1999 survey showed that the settlement pattern and history of the western half of the Dhibān Plateau is very similar to that of the eastern region (cf. Ji and Lee 1998). This observation indicates that the whole Dhibān Plateau can be treated as one geographical unit for the diachronic study of settlement pattern and land use. Some of the noticeable sites are illustrated in the following section, some of which are new archaeological sites and apparently deserve intensive excavations and discussion in the future.

Major Archaeological Sites

1. East of the Modern King's Highway

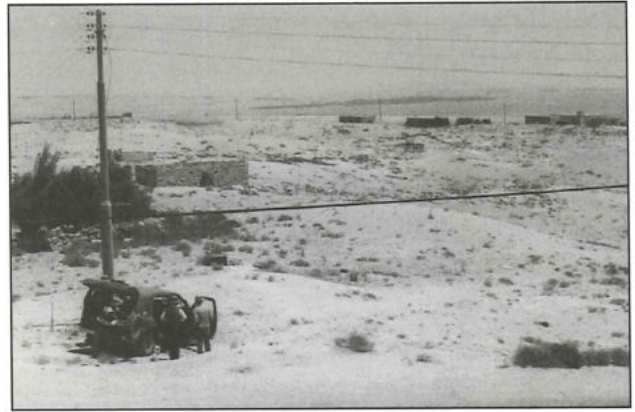
Rujaym al-Qaṭṭar (Site 222; PG: 233.27/095.86) includes at least four Nabataean structures and one modern animal pen built on top of one ancient structure. Although this site is situated on a rocky ridge overlooking Wādī al-Qaṭṭar and a potential Nabataean dam built across the wadi, it has very limited view over the surrounding area (Fig. 2). Yet, Rujaym al-Qaṭṭar commands a clear visibility over Sites 223 to 225, suggesting that this site was the center of the Nabataean agricultural complex in Wādī al-Qaṭṭar. The main structure is located on a spur, a continuation of the rocky ridge on which Sites 226 and 227 are situated. The structure measures about 25 x 25 m, although traces of the precise plan is impossible because of



2. A Potential Nabataean Dam (Site 223) at the Wādī al-Qaṭṭar.

erosion and the modern animal pen built on top of this structure. The walls stand one course high (30 to 50 cm) and measure 60 to 80 cm thick. There seem to be some inner wall lines dividing the structure into several chambers. About 110 m south of the main structure is a circular watchtower which remains three courses high above the ground. It measures 6.6 x 8.2 m, and the walls are 70 cm thick. It is solidly constructed of medium to large semi-hewn and unhewn stone blocks. There is another watchtower set on the lower ridge, about 120 m from the central square building. The diameter of this structure is about 4.8 m and presently stands up to 1.7 m high above the ground. The walls are 1.3 to 2.0 m thick and are made up of medium to large boulders. About 200 m northeast of the central building and about 400 m northeast of the first watchtower is a rectilinear building, probably a domestic structure, measuring 5.3 x 6.3 m. The entrance is visible on the east side of the structure which has walls 75 cm thick. This building is constructed of small to medium sized boulders, a feature which somewhat contrasts with the two watchtowers. Near the two watchtowers are three cupholes dug into bedrock, which average 15 cm in diameter and 8 cm in depth. The survey team collected one flint and 24 undiagnostic sherds, all of which are dated to the late Hellenistic and Nabataean periods.

Khirbat al-Mushayrifa (Site 254; PG: 232.70/100.05; Glueck's Site 95) is situated ca. 5 km southwest of Umm ar-Raṣāṣ and 5 km northeast of Khirbat al-Laḥūn, on the north side of the modern highway from Umm ar-Raṣāṣ to Dhibān (Fig. 3). Glueck (1934: 37) described Khirbat al-Mushayrifa as "a small site, consisting of several ruined buildings, low mounds and abandoned cisterns, in addition to several modern houses." Presently, the ruins are situated on a gradual hillside that slopes downward to the east and cover an area ca. 100 x 150 m. The main structure is possibly a villa measuring 24 x



3. Khirbat al-Mushayrifa (looking northeast).

30 m with some walls surviving up to 4 m high (Fig. 4). The exterior walls measure ca. 1.1 m wide and the interior walls ca. 1 m wide. At least seven interior wall lines are discernable in addition to three exterior walls. The builders of this structure used semi-hewn or bossed medium to large limestone blocks. Approximately 100 m southwest of the main building are the foundation walls of a building complex which covers an area of 14 x 20 m. A cluster of wall lines which can be discerned with some confidence suggest a large rectangular structure with more than six large chambers. The exterior and interior walls average 1 m wide and are preserved up to 40 cm above the ground. Like the main structure, this building is constructed of medium to large semi-hewn stone blocks. Between the main building and the building complex is a cistern estimated to be 4.5 m in diameter and 10 m depth. It is well preserved and presently in



4. Potential Nabataean Structures at Khirbat al-Mushayrifa (looking southeast).

use. About 10 m west of this cistern is a cave whose interior measures ca. 4 x 7 m.

A third architectural feature, discernable about 25 m southwest of the building complex, appears to have been a large east-west oriented building with multiple inner chambers. There are at least two visible exterior walls and four interior walls. The whole structure measures 16 x 32 m with exterior walls about 85 cm thick. The walls are preserved only one course high and are comprised of undressed small to medium stones. The survey team registered two additional cisterns: one approximately 5 m north of the third building and the other 50 m south of the main building. Both cisterns are estimated 5 m deep and not presently in use. At least two cisterns are left unregistered at this site. There are numerous modern tombs that spread over the entire site. The village is presently in the process of resettlement, and ancient building materials have been carried off by local residents to construct houses and field walls. At Khirbat al-Mushayrifa, Glueck (1934: 37) found Nabataean sherds in addition to a piece of *sigillata* ware. The survey team collected approximately 100 diagnostic sherds dated to the Hellenistic, Roman, Byzantine, and Middle Islamic periods.

Approximately 2 km west of Umm ash-Shujayra al-Gharbiyya (Site 214) is Qaryat Falḥa (Site 293; PG: 228.40/103.40; Glueck's Site 160), a modern town on top of an ancient town. Glueck (1939: 116) surveyed this site and observed "a few modern houses set among the ruined foundations of a large ancient settlement." Since the modern village has emerged on the site and consists largely of ancient settlement debris, only one section of ancient wall is currently discernable under one modern house. The wall lines indicate a rectangular structure (ca. 2.8 m x 6.9 m). These walls are one to two courses high and measure about 60 cm thick. At this site, the survey team registered two possible ancient cisterns. The survey team was told that there used to be

two large ancient cisterns that were filled and covered by the modern road which bisects the modern village. A large number of sherds were found in association with abandoned modern buildings, clearly indicating the presence of ancient remains under the modern village. At Qaryat Falḥa, we collected diagnostic Late Hellenistic to Early Roman, Late Roman, Byzantine, Early Islamic, and Middle Islamic pot sherds with one possible Iron II sherd. The virtual absence of Iron Age sherds is important for the historical geography of the region, since some scholars have identified Qaryat Falḥa with Qaryat in the Mesha inscription (Dearman 1989: 179). Given the sparsity of Iron Age ware, Qaryat may be located somewhere else, very likely at Khirbat al-Qaryat in the 'Aṭarūz region.

Khirbat al-Qubayba (Site 283; PG: 226.15/105.05; Glueck's Site 164), situated about 3 km northwest of Qaryat Falḥa, covers an area of ca. 150 x 250 m (Fig. 5). Khirbat al-Qubayba is dotted with numerous caves and cisterns that appear to be ancient, yet some of them are presently in use. There are a number of modern houses that were built at the site about 50 to 70 years ago, but now in different levels of decay. Many of these modern buildings were built on top of foundations of ancient buildings. Glueck (1939: 116) visited Khirbat al-Qubayba during his survey and described it as "a very small ruined site, marked by a large grave and a fairly modern house."

At Khirbat al-Qubayba, the survey team



5. Khirbat al-Qubayba (looking southeast).

identified at least four ancient architectural remains, one of which appears to be a large rectangular house. This rectangular structure measures approximately 10 x 19 m and includes a couple of interior walls. On the south side of Khirbat al-Qubayba is an ancient animal pen, roughly 31 x 31 m square. The walls are preserved only about 10 cm high above the ground and two to three courses wide. At the northeast corner of this animal pen is a small rectangular building measuring 2.5 x 3.8 m with an entrance visible on the west side. Approximately 50 m southwest of the animal pen is a roughly square building (ca. 6.0 x 6.3 m) with remains standing about 20 cm above the ground. The entrance to this building, which measures 90 cm in width, is visible on the northern side. Immediately northwest of this building is a natural cave which is 3.5 m long and 5 m wide. This cave seems to have recently been used for seasonal purposes. It is very likely that at Khirbat al-Qubayba, caves were also used for dwelling and storage in the ancient period. About 10 m west of the aforementioned cave is a cuphole dug into bedrock, measuring 30 cm in diameter and 50 cm in depth. As mentioned above, there are a large number of cisterns at this site, only two of which were registered during the survey. Both cisterns are estimated to be about 4 m deep, and their principal openings are rectilinear. Water at the bottom of the two cisterns may suggest present use of the cisterns.

According to local people near the site, the modern village at Khirbat al-Qubayba was abandoned about 30 years ago when settlers move to the village of 'Aliyya (east) by the modern King's Highway. At Khirbat al-Qubayba, Glueck (1939: 116) collected a small quantity of Nabataean sherds in addition to several pieces of *sigillata*. The 1999 survey of Khirbat al-Qubayba yielded diagnostic Hellenistic to Early Roman, Late Roman, Byzantine, Late Byzantine to Early Islamic, Middle Islamic, and Ottoman pot-

sherds.

Maq'ad bin Naṣrallah (Site 296; PG: 226.49/103.28; Glueck's site 158) is an unoccupied settlement site situated on a hill somewhat cut by Wādī Falḥa, ca. 2 km southwest of Qaryat Falḥa. Glueck (1939: 116) visited this site and remarked that, "practically all vestiges of the ruins which once marked the place have disappeared. The ancient occupation of the site is, however, testified to by a small quantity of Nabataean sherds of all kinds found there, including several pieces of *sigillata*. There were also several early Byzantine sherds." Presently, only one ancient building which can be traced with confidence shows the presence of ancient settlements at this site. The wall remains suggest a well-built rectangular building (ca. 10.1 x 11.3 m) divided into two rooms by a compartment wall. The walls are preserved up to 75 cm above the ground and measure 80 cm thick. The ancient remains were robbed for modern use in animal pens and burials. More than ten caves, all of which were recently used for dwelling and seasonal purposes, are characteristic of this site, presumably indicating that at Maq'ad bin Naṣrallah the ancient settlers utilized these caves for the same purposes (Fig. 6). Most of the caves were natural and average 4 x 10 m. There are at least six cisterns associated with this site. In contrast to Glueck's survey (1939), we observed numerous pot-sherds on the surface and collected more than 500 pieces of pottery. The pottery assemblage at the site includes Hel-



6. A Cave Settlement at Maq'ad bin Naṣrallah .

lenistic, Early Roman, Byzantine, Late Byzantine to Early Islamic, and Middle Islamic sherds.

2. *West of the Modern King's Highway*

Situated about 3.5 km north of Tall Dhibān is a modern village on an ancient settlement site called Duhfura (Site 334; PG: 223.82/104.60; Glueck's Site 165; currently, 'Aliyya West). At this site, Glueck (1939: 124) documented a few ancient foundation walls, cisterns, and cave settlements. The modern village currently covers the entire area between the modern King's Highway in the east and Wādī Umm Shajara in the west. In the middle of the modern village, the survey team identified a possible ancient wall line that stretches about 7 m in the north-west-southeast direction. About 20 m northeast of this wall line is a small cairn (3 m in diameter), which is seemingly the remains of an ancient circular structure. To the west of the modern village are three ancient cisterns and one modern cistern dug into bedrock near the edge of the ridge on which the village is situated. The ancient cisterns, all of which are currently in use, average 3 m deep and have circular primary openings. Along the wadi slopes are dense sherd scatters, especially around the three ancient cisterns. Near the southeastern edge of the ridge stand the ruins of a square structure (ca. 7 x 7 m) which appears to have been a watchtower associated with the village. The village contains several additional cisterns, some of which according to the villagers are ancient. The name of the village was changed from Duhfura to 'Aliyya (west) about 15 years ago, when King Hussein visited the village and suggested to change the name to 'Aliyya. Presumably, Duhfura was a large ancient settlement associated with agriculture and animal breeding. Duhfura includes diagnostic Persian-early Hellenistic, late Hellenistic-Roman, Nabataean, and Byzantine sherds.

Khirbat adh-Dhuhayba (Site 344; PG:

223.10/102.20; Glueck's Site 155) is a small, completely destroyed settlement dotted with a large number of caves, cisterns, and modern houses (Fig. 7). Glueck (1939: 115) saw "three butm trees growing among the ruins," yet at the site, the survey team found no butm trees, although a large number of fig trees and olives trees are growing in the vicinity. There are several caves at Khirbat adh-Dhuhayba, three of which were measured and registered during the survey. One of them, measuring 9.0 x 12.3 m, is divided into two sections by an internal wall. In the center of this cave is a hearth, apparently recently used, and a small niche appears on the south side of the cave. The floor of the cave is about 80 cm lower than the surrounding ground. Khirbat adh-Dhuhayba also includes at least seven cisterns, all of which are ancient, according to local residents. The survey team also identified possible ancient wall lines which remain 6 m long and three courses wide (ca. 60 cm). No further ancient architectural features are visible at this site. Khirbat adh-Dhuhayba contains Hellenistic, Roman, Byzantine, Early Islamic, and Middle Islamic sherds.

Approximately 1 km north of Khirbat adh-Dhuhayba is Rujaym Umm Shajara (Site 350; PG: 222.94/103.34) which is famous among local people for three butm trees at the site, one of which died in 1996. It is not improbable that Glueck (1939: 115) confused this site with Khirbat adh-Dhuhayba when he stated that three butm trees were characteristic of Khirbat adh-



7. Khirbat adh-Dhuhayba (looking northwest).

Dhuhayba. This speculation stems from the observation that the two sites are situated within sight of each other and Khirbat adh-Dhuhayba lacks butm trees. At Rujaym Umm Shajara, a large building complex is associated with about 15 cisterns. The central structure of this building complex appears to be the ruins of a church (ca. 7.3 x 13.2 m) oriented in the east-west direction. The church seems to have been divided into a main hall and an antechamber by a thick wall. On both sides of the church building are multiple rectangular rooms, some of which were used for burials during later periods. In the middle of the complex is an open courtyard that includes a stair leading to three underground square rooms. The entrance to this underground complex is currently blocked by boulders, yet a local *imām* informed the survey team that each of the three rooms measure 4 x 4 m, and one of the chambers is connected to a cistern. Located on the west and north sides of the complex are cisterns and multiple rectangular rooms. The main gate to the complex may be situated on the northern side of the site. All the walls of this building complex are solidly constructed of small to large stones and are two to three courses wide. Approximately 30 m east of the building complex is a roughly square structure (ca. 6 x 6 m) constructed with medium stones. The 1999 survey uncovered Late Roman, Early Islamic, and Middle Islamic sherds at this site.

Khirbat al-Bayaḍa (Site 362; PG: 219.90/103.40), also called Abār Tall al-Bayaḍa, is situated on the edge of large promontory approximately 1.3 km southwest of the modern village of Barza. This site seems to include the remains of a strongly-walled rectilinear fort that was related to the ancient road from the Dhibān Plateau to al-Qaryat in the 'Aṭarūz region. Khirbat al-Bayaḍa contains numerous building remains and wall lines very likely dated to the Iron Age, suggesting that the settlers constructed a large number of houses in the center of this fortress. Con-

structed directly above bedrock, the fortress was possibly a casemate system. The total perimeter of this external wall system is estimated to be about 500 m, and thus, the dimensions of Khirbat al-Bayaḍa fort measure about 150 m north-south and average 100 m east and west. In the northern part is a possible gate system associated with a couple of guard rooms. Khirbat al-Bayaḍa may also include watchtowers built as part of the casemate defense system. The overall plan of the houses in the center of this site is not discernable, although most of the structures seem to have been rectangular buildings with multiple rooms. In general, the walls of these buildings are two to three courses wide (ca. 1.2 m) and have been preserved up to 50 cm above ground. According to the pottery collected at this site, Khirbat al-Bayaḍa appears to have been a stronghold village probably built no later than early Iron II, which suggests a possible relationship with King Mesha in Moab. This site overlooks Sayl Haydan and provides a commanding view of the hills and slopes in the 'Aṭarūz region. Khirbat al-Qaryat and Khirbat 'Aṭarūz are clearly visible from this site. Khirbat al-Bayaḍa includes numerous Late Bronze II, Iron I, and Iron II sherds in addition to a small number of Byzantine sherds.

Khirbat az-Zaqība (Site 374; PG: 221.01/105.22) is located on a low mound, ca. 1.5 km north of the modern village of Barza, commanding an excellent view over the Sahl Mustah region (Fig. 8). This site consists of



8. Khirbat az-Zaqībah (looking northwest).

at least two large building complexes separated by a possible courtyard. The southern complex, approximately 18 m (north-south) by 22 m (east-west), includes at least nine rectangular rooms and one possible inner courtyard. The walls are still preserved up to 1 m high, and stand three to four courses wide. The northern complex covers an area of ca. 35 x 35 m. While most of the external walls and corners of this northern complex are clearly visible, its internal plan is difficult to determine. Yet, it is apparent that this complex contains more than 15 compartment walls. The external walls of this northern complex averages 1.1 m thick and remains about 1 m above the ground. Both structures are solidly constructed of medium to large semi-dressed limestone blocks, and appear to have been public buildings. Approximately 30 m east of the northern building is a rectangular shaft tomb and a large natural cave that is currently in use for animals. There is an additional rectangular structure about 25 m northeast of the northern complex, although its overall plan is difficult to trace. At Khirbat az-Zaqibah, the survey team also noted two cisterns currently in use. An interesting object that the survey team found at this site is a small rectangular limestone block with an Early Islamic, possibly Kufic, inscription. This stone block was built into the wall of an abandoned modern building that still stands on the northeastern side of the site. The inscription consists of four lines, only one of which is legible, the bottom line reading "In the name of God...." Given the building remains and other associated findings, Khirbat az-Zaqiba seems to have been a village with public buildings, associated with agriculture and animal husbandry. The pottery from this site indicates that it was occupied in the Late Bronze II, Iron I, Iron II, Hellenistic, Roman, Byzantine, Early Islamic, and Middle Islamic periods.

Rujaym Qala'ma (Site 397; PG: 220.00/108.20), also known as Rujaym Qala'ma

Abū al-Husein, is situated at the northernmost spur of a stretch, which is surrounded almost completely by a loop in Sayl Haydan (Fig. 9). Although tumbled stones cover an area of 40 x 100 m, the ruins include distinctive defense wall lines and apparently represent two fortresses, one of which was built on top of the earlier one (Fig. 10). The northern walls of the later fortress remain standing more than ten courses high, suggesting a fairly strong fortification system. The building was built in the northwest-southeast direction according to a rectangular plan measuring 25 x 60 m. The fortress includes several wall lines, yet it is difficult to determine the exact plan of the inner structures. One cistern is situated inside the fortress. On the eastern section of this fortress is a possible round watchtower, probably slightly higher than the fortress. There may have been a 3m wide stairway leading up to the round tower. This later



9. Rujaym Qal'ama (looking northwest).



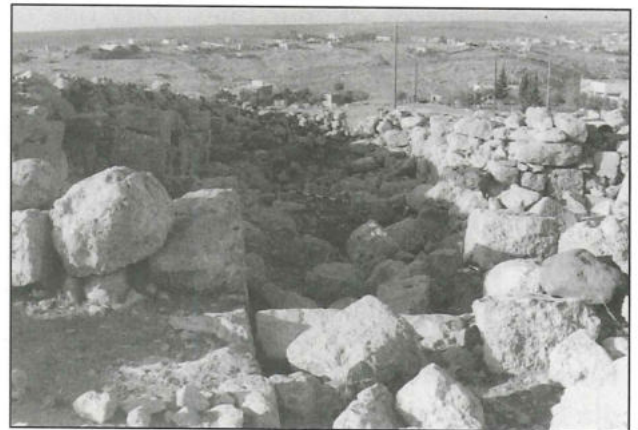
10. Building Remains and Fortification Walls at Rujaym Qal'ama (looking northwest).

fortress was apparently built on top of an earlier fortress that seems to have measured about 50 x 100 m. Although two thirds of this earlier fortress is completely covered up by the later one, its northwestern part still remains intact and includes at least two structures, measuring 4 x 4 m and 14 x 15 m respectively, built adjacent to the northern fortification wall. The fortification walls are constructed with medium unhewn and semi-hewn limestones and are two to four courses wide. The location, plan and size of this early fortress suggest a stronghold of some sort, possibly related to the defense system of Moabite King Mesha. This suggestion, however, should remain speculative, since diagnostic Iron Age sherds are absent at Rujaym Qal'ama. At this site, the survey team collected more than 200 sherds of which Hellenistic and Roman sherds dominated the ceramic assemblage.

Khirbat 'Ayn Shuqayq (Site 398; PG: 219.50/101.50; Glueck's Site 105) is a modern village on an ancient settlement site situated on the western edge of the Dhibān Plateau, ca. 4.5 km west of Tall Dhibān. At this site, Glueck (1934: 51) noticed the ruins of ancient walls and door jambs which he attributed to the Roman period. According to our survey, building remains scattered over an area 100 x 150 m indicate that this site was a conspicuous settlement in antiquity. Fortification walls approximately 70 m and 80 m in length can be traced on the northern and western sides of the site respectively. In particular, the western defense walls still stand more than ten courses high, ca. 3 m above the ground, and are constructed of small to large undressed limestone and basalt stone blocks. It is possible that casemate walls comprised part of the defense system. Inside the fortification walls are occasional wall lines and at least three large building complexes. One conspicuous building is a rectangular one in the center of this site, measuring ca. 19 x 27 m and consisting of at least four large rooms and one possible

courtyard. Another large building is observable about 40 m northwest of the central building, which measures 8 x 10 m and includes three rooms that are divided by two arches. An important discovery is a rectangular mosque with sections of three walls still standing and the *mihrāb* (prayer niche) in the south wall still visible (Fig. 11). This mosque is located on the south side of the site, ca. 50 m southeast of the central building complex. Given the pottery collected at 'Ayn Shuqayq, the mosque is believed to have been built in the Umayyad period. The ancient ruins have been robbed for building stones by modern villagers for houses in the area, but several of them still remain standing on the ancient site. The survey team found at least three cisterns and three caves within the fortification walls and five additional cisterns within the boundary of the modern village. At 'Ayn Shuqayq, the authors noted numerous pottery sherds scattered on the surface, all of which are dated to the period from the Hellenistic to the Middle Islamic. The sparsity of pre-Hellenistic pottery at this site probably indicates that this site was first settled after the Moabite kingdom came to an end in late Iron II.

Khirbat as-Saḥīla (Site 403; PG: 218.09/098.81; Glueck's Site 154) is a village ruin on a high point near the southwestern end of the Dhibān Plateau, overlooking the entire plain region west of Tall Dhibān. Glueck



11. An Umayyad Mosque at Khirbat 'Ayn Shuqayq (looking southeast).

(1939: 114-15) visited this site and described two *buṭm* trees at the site as “a landmark for a distance of many kilometers.” Glueck also added, “some ruined walls were visible, among which stands a modern house built out of well-cut stones, obviously purloined from some earlier building on the site which has now completely disappeared.” Currently, Khirbat as-Saḥila includes six modern stone houses and numerous graves built on top of ancient settlements. The survey team managed to discern three ancient building complexes, but failed to determine the overall plan of the buildings. One of the complexes covers an area of 15 x 20 m with its external walls measuring 1.4 m wide. Another complex, found ca. 20 m northeast of the first one, also covers an area of about 15 x 20 m with walls two to three courses wide (ca. 80 cm). A third building complex is situated between a *buṭm* tree in the site and the first building complex. The vicinity of Khirbat as-Saḥila includes several cisterns, two of which are presently marked with impressive stone arches. At this site, Glueck (1939: 115) found “a few Nabataean sherds and some fragments of comparatively modern Arabic ware.” The 1999 investigation of this site yielded a large number of Hellenistic, Byzantine, Early Islamic, and Middle Islamic pottery sherds with two Iron II sherds.

Khirbat al-Mathlutha (Site 411; PG: 221.00/099.05; Glueck’s Site 104) is located about 3 km east of Khirbat as-Ṣaḥila. This site is a small village ruin that contains several ancient building remains. Immediately southeast of a modern village mosque is a rectangular structure (ca. 6.0 x 8.0 m) constructed of very large undressed limestone blocks (Fig. 12). Although the walls are only two courses wide, they measure 2.0 m thick. North of this structure are the ruins of a church, of which only the eastern half remains intact. The apse (9.5 m in diameter) is clearly visible on the eastern side, and the eastern external walls are also easily dis-



12. Building Remains at Khirbat al-Mathlutha (looking northwest).

cernable. Three to four more ancient wall lines are also found along the south and east sides of the two buildings. According to villagers, there were ruins of ancient buildings ca. 50 m north of the church, yet they have recently been bulldozed for houses. A large number of modern graves dot this site, and there are several cisterns. During his Transjordan survey, Glueck (1934: 51) found Nabataean, Byzantine, and Islamic ware at Khirbat al-Mathlutha; the authors also collected more than 100 sherds, all of which are assigned to the Hellenistic, Roman, Byzantine, Early Islamic, and Middle Islamic periods.

Settlement Patterns in the Dhibān Plateau

To combine the three seasons of fieldwork from 1996 to 1999, pottery of the Chalcolithic and Early Bronze periods were collected at 35 sites, which is 8.31% of the sites examined. Accordingly, the Chalcolithic-Early Bronze Age seems to have been a first settlement intensification in the Dhibān Plateau region.

Surprisingly, none of the sites include diagnostic Middle Bronze sherds, which seems to be problematic and puzzling, given that some of the Transjordan sites in the vicinity of the Dhibān Plateau, e.g., Khirbat al-Iskandar and Tall al-‘Umayri, include abundant Middle Bronze evidence. This sur-

vey data, however, is in line with the results of the excavation at al-Laḥūn, Aroer, and Dhibān in the Dhibān Plateau. Middle Bronze evidence is absent at these major sites in the survey region. Although some of the survey sites may yet contain Middle Bronze evidence as the pottery analysis continues, it is very likely that only a few sites hold promise of having been substantially occupied in the Middle Bronze period. That is, we suggest that in the Dhibān Plateau, a long-term occupational gap followed an Early Bronze settlement intensification, probably late in the Early Bronze III-IV period.

A resurgence in settlement seems to have come in the Late Bronze II period, since the survey team collected Late Bronze sherds at ten of the 421 sites (2.38%). Probably most of these Late Bronze sites were continuously settled in the Iron I period. Likewise, Iron II settlers kept using the majority of Iron I sites for their habitation. This fact shows a continuity of settlement from the Late Bronze II period to the Iron Age II. Iron I pottery was found at 19 sites (4.51%), and this number increased to 53 sites (12.59%) for the Iron II period. The Persian period witnessed a substantial decline in population; only 13 sites yielded diagnostic Persian pottery during the survey.

The Hellenistic period experienced a return of settlement and population with at least 78 sites occupied. This settlement intensification cycle continued to the end of the Middle Islamic period, possibly without any substantial disruptions. Hellenistic sherds were found at 78 sites (18.53%), and the Roman period was represented by pottery at 110 sites. The Dhibān Plateau witnessed the period of greatest settlement during the Byzantine period when 153 sites (36.34%) were in use. This comparison shows a steady, substantial increase in population from the Hellenistic period to the Byzantine period in the survey area. The Early Islamic period seems to have had considerable decline in population, as the number of settled sites decreased to 60 (14.25%) during this period. The Middle Islamic period continued this occupational decline, with 47 sites having Middle Islamic pottery.

A cross-tabulation analysis is next in order to determine whether there is any association between region and archaeological sites by period (Table 4). Of the 35 Early Bronze sites, 34 (97.14%) are located east of the modern King's Highway. This settlement pattern also holds true for the Late Bronze and Iron I periods, although Late Bronze and Iron I sites are sporadically

Table 4. Cross-Tabulation of Archaeological Sites by Period and Region, 1996-1999 (N=421).

Region/Period	EB	MB	LB	Iron 1	Iron 2	Per	Hell	Rom	Byz	Els	MIs
East of the King's Highway											
Saliya	19	0	5	10	20	4	20	39	65	20	10
Aliyyan	6	0	1	2	9	4	10	13	12	5	6
Lehun	4	0	0	0	3	0	18	20	10	1	6
Falha	5	0	2	4	8	1	12	14	22	15	10
West of King's Highway											
Duhfura	0	0	0	0	4	2	4	5	14	5	3
Barza	1	0	2	3	8	2	9	15	21	10	8
Saheela	0	0	0	0	1	0	5	4	9	4	4
Total	35	0	10	19	53	13	78	110	153	60	47

found in the Barza region. The Barza and Duhfura regions saw a substantial increase in settlement during Iron II. This population increase in the north and northwest part of the Dhibān Plateau seems to reflect the Moabite expansion to this region under the leadership of King Mesha. Note that this area provides an excellent view to the 'Aṭaruz region mentioned in the Mesha inscription. Despite this expansion to the northwest, however, the survey shows the heaviest concentration of Iron II sites in the regions of as-Sāliya, 'Aliyyān, and al-Laḥūn. This fact indicates that Iron II settlements centered east of the King's Highway, or at least, that area was more densely populated than the western part of the Dhibān Plateau. This sub-regional disparity continued into the Hellenistic and early Roman periods.

The survey results illustrate the zenith of ancient settlement history in the Dhibān plateau during the late Hellenistic-early Roman and Byzantine periods. Accordingly, it is not surprising to note that in the Barza region, the second increase in occupation occurred in the late Hellenistic and early Roman period.

This prosperity continued throughout the Roman and Byzantine period. Despite this increase in population in the western plateau, however, notice that approximately 75% of the Roman and Byzantine sites are still situated in the eastern part of the Dhibān Plateau. The Early Islamic period represents the transition from the high settlement intensification of the Byzantine period to a much lower population level of the Middle Islamic period. It should be mentioned that a sharp decline in settlement came to the entire region of the Dhibān plateau, but it was most obvious in the regions of as-Sāliya, 'Aliyyān, and al-Laḥūn. Recall that during the Iron II period, these regions were the most densely populated in the Dhibān Plateau. The survey shows no such concentration of settlements in the eastern plateau area during the Middle Islamic period. Mid-

dle Islamic sites are quite evenly spread across the Dhibān Plateau.

Conclusion

The three seasons of archaeological survey in the Dhibān Plateau have produced new evidence for understanding the settlement history of this region and the nature of its settlement pattern. The results show that during the Early Bronze period, an increase in occupation occurred in the eastern part of the region along Wādī al-Mūjib, but this period was followed by a long occupational gap during the Middle Bronze and possibly the Late Bronze I periods. Iron II remains in the region have also proven to be impressive, since a large number of sites yielded Iron II sherds. Surprisingly, Iron I evidence in the Dhibān Plateau is relatively weak, which stands in contrast with the sharp increase of Iron I occupation in the Mādabā Plains. However, many sites appear to have been occupied in the late Hellenistic, Roman, and Byzantine periods. This pattern roughly corresponds with the archaeological data from other regions in central Jordan. The Early and Mid Islamic periods saw a reduced population in the Dhibān Plateau region, and this decline lasted until a strong resurgence of occupation in the modern period. In view of settlement pattern, a concentration of ancient sites in the northern and southeastern regions is bounded by as-Sāliya, al-Laḥūn, 'Aliyyān, and Dhibān, and this concentration contrasts with the southwestern and eastern parts of the plateau. This is particularly the case in the pre-Islamic period.

In conclusion, we apparently need further studies of the Dhibān Plateau with special attention to the sources of the changes in settlement pattern and history. Yet, the three-year survey fieldwork in the Dhibān Plateau has successfully filled out the gap in our knowledge in the region's history. The fieldwork especially during 1999 has documented rich and diverse human occupation

in the northern and northwestern region of the Dhibān Plateau. A more careful analysis of the results will be in order shortly. In the near future, the Dhibān Plateau project will launch a new phase of archaeological investigation in the regions of 'Aṭarūz and Machaerus so that we can understand the relationship between the Dhibān Plateau and the hilly ridges north of Sayl Haydan and Wādī al-Wāla. Attention will be also given to the desert fringe of the Dhibān Plateau in order to enhance our knowledge about its relationship to the desert area east of the region.

Acknowledgments

We wish to thank all the people who made the 1999 fieldwork successful and productive. Our gratitude first goes to Dr Ghazi Bisheh and his staff at the Department of Antiquities. Without their support for and interest in this project, the fieldwork would not have been possible. The project was

deeply indebted to research grants from the Versacare Foundation and the Korean Research Foundation. We would like to extend our warm thanks to the members of the two foundations. Financial support was also gratefully received from several individual donors. Much support also came from Dr Larry T. Geraty at La Sierra University and Dr Kye Hoon Shin at Sam Yook University, Korea. Their support and assistance are much appreciated. Last but not the least, we would like to thank all the staff and student volunteers who participated in the project and worked with us.

Chang-Ho C. Ji
La Sierra University
Riverside, CA 92515
U S A

Jong Keun Lee
Sahmyook University
Seoul, Korea

Bibliography

- Dearman, J. A.
1989
Historical Reconstruction and the Mesha Inscription. Pp. 155-210 in J. A. Dearman (ed.), *Studies in the Mesha Inscription and Moab*. Atlanta: Scholars Press.
- Glueck, N.
1934
Explorations in Eastern Palestine I. AASOR 14. New Haven: The American Schools of Oriental Research.
- 1939
Explorations in Eastern Palestine III. AASOR 18-19. New Haven: The American Schools of Oriental Research.
- Herr, L. G., and Christopherson, G.
1996
The Madaba Plains Project Survey Manual. Berrien Springs: Andrews University.
- Ji, C. C. and 'Attiyat, T.
1997
The Reconnaissance Survey of the Dhibān Plateau, 1996. *ADAJ* 41:115-28.
- Ji, C. C. and Lee, J. K.
1998
Preliminary Report on the Survey of the Dhibān Plateau, 1997. *ADAJ* 42: 549-71.