THE SURVEY IN THE REGIONS OF 'IRĀQ AL-AMĪR AND WĀDĪ AL-KAFRAYN, 2000

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A third season of the survey in he regions of 'Irāq al-Amīr (عراق الأمير) and Wādī al-Kafrayn (وادي الكَوْرين) took place in July and August, 2000. In 1996, the first season of the archaeological survey covered the area within 5km radius of 'Iraq al-Amīr focusing on the region along Wādī as-Sīr (وادي السير) (Ji 1998a). In 1998, the survey area was extended westward to the Jordan Valley, covering the area which extends from Wadī al-Kafrayn in the south to the rocky ranges and hills overlooking Wadī Shu'ayb (وادي شعيب) to the north and the west (Ji and Lee 1999). The primary goal of the 2000 survey was to expand our previous work westward and eastward in order to find more archaeological evidence of human activities and thus to understand settlement pattern and history of the 'Iraq al-Amīr region in a broader context. To this end, the 2000 survey first centered on locating new ancient sites in the regions of Wadī ash-Shita (وادي الشت), Wādī al-Baḥḥāth (وادي البحاث), the Wādī al-Kafrayn dam, the Wādī Shu'ayb dam, and the modern city of Wadī as-Sīr (see Fig. 1). Part of the 2000 survey area, however, was visited and surveyed by various research groups and scholars during the past century, such as Glueck (1939; 1951), Prag (1991), Prag and Barnes (1996), Villeneuve (1988), Waheeb (1997), and Yassine, Ibrahim, and Sauer (1988). Accordingly, a second primary purpose of the 2000 survey was to revisit all the known sites in the survey area to ascertain previous datings and descriptions of each site.

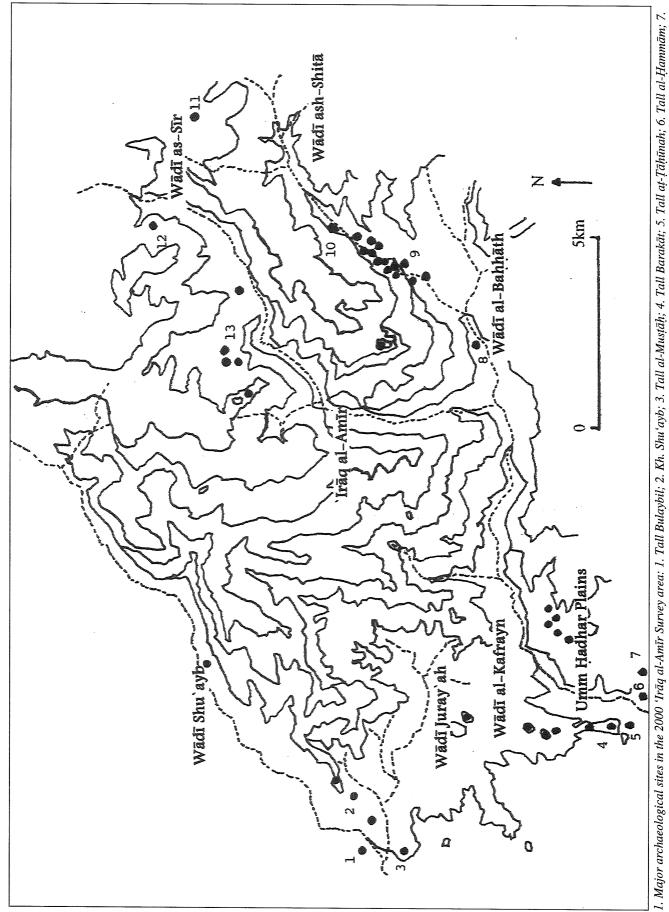
Besides, given the importance of 'Irāq al-Amīr to the history of the Iron II to Roman periods in Jordan, special attention was given to the investigation of the extent and nature of the Iron Age, Hellenistic, and early Roman settlements in the region. Put another way, in addition to the two preceding research goals, the third season of our survey was designed to increase our knowledge, both chronologically and geographically, of 'Irāq al-Amīr's relationship with and relative role to the development of other ancient Iron Age, Hellenistic, and Roman ruins of the vicinity such as Khirbat as-Sīr (خربة سار) and Khirbat Sār (خربة سار) (both in the immediate vicinity of the modern city of Wādī as-Sīr) and outside the vicinity to the sites of Tall Barakāt

(تل بركسات), Khirbat al-Ḥabbasa (خربة الحبّسه), Tall al-Ḥammām (تل الحمّام), and Tall Bulaybil (تل بليبل), all of which are located near the Jordan Valley.

Along with the 1996 and 1998 surveys, at each archaeological site the 2000 survey team recorded all the visible architectural remains above ground and made sketch maps for them. Off-site features were also investigated and documented as much as possible. A major effort, however, centered on the collection of pottery sherds and artifacts at each site. The Madaba Plains Project Survey Manual was adopted continuously as the main guide for these efforts (Herr and Christopherson 1996). For the present report, we proceed in two stages. Part 1 summarizes the results of the 2000 archaeological survey and suggests a chronological distribution of archaeological remains in the region, and in the process, highlights the significance of the 2000 survey for the study of Iron II-Hellenistic history in Jordan. Part 2 presents detailed descriptions of some prominent ancient ruins in the 2000 survey area.

Results of the 2000 Survey

As presented in the previous reports and papers, in 1996 and 1998, a total of 174 sites were visited and studied (Ji 1997; 1998a; Ji and Lee 1999; Loh and Ji 2000). To summarize, of the 174 sites recorded in the previous two surveys, 46 sites contained pottery sherds dated to the Chalcolithic and Early Bronze periods. Early Bronze IV-Middle Bronze I, Late Bronze II, and Iron I sherds came from seven, four, and 11 sites respectively, whereas Iron II-Persian pottery was found at 56 sites, clearly indicating an increase in human activities in the region during the late Iron II-Persian periods. This settlement increase continued into the subsequent Hellenistic and early Roman periods; a variety of Hellenistic and early Roman pottery corpus was collected at 53 sites. During the late Roman period, the number of settlement sites appears to have decreased to 32 sites, yet it increased dramatically again during the Byzantine period, since Byzantine pottery sherds were collected at 110 ancient sites. Finally, Early and Middle Islamic sherds came from 27 and 18 sites respectively.



Kh. al-Ḥabbasa; 8. Rujm al-Buḥayra; 9. Kh. al-Baḥḥāth; 10. Kh. ash-Shitā; 11. Kh. Sār; 12. Kh. as-Sīr; 13. Kh. Umm Farwa.

In 2000, a total of 42 archaeological sites were found or visited, and this discovery brings the survey site total to 216. The 2000 archaeological sites were dominated by cities, villages, small watchtower-like structures, and watermills, which accounted for 71.43% of the site total of 42 (see **Table 1**). There were 14 cities or villages in the 2000 survey area. Nine of the 42 sites were classified as circular watchtower-like structures, and the four agricultural feature sites, which included cisterns, dams, terrace walls, and cup-holes, almost equaled the number of farmstead buildings and seasonal camping sites. The survey team also discovered seven watermill sites. Turning to site position, we saw that 33 sites (78.57%) are situated on hills or ridges overlooking their vicinities; in contrast, a plain area contains only one (see Table 2). According to the previous surveys, in the 'Iraq al-Amīr region the

two most common types of archaeological sites are fortified cities and circular watchtower-like structures located on high hills or ridges. This was also the case in the 2000 survey area. For example, in 2000, we discovered and documented a large number of circular watchtowers (Survey Sites 175-179 and 187-191) on the rocky ridges east and west of the Wadī al-Kafrayn dam, some of which were possibly associated with the forts at Tall Barakāt and Khirbat al-Habbasa (see Figs. 2-4 and below).

On the other hand, a chronological comparison of the findings of the 2000 survey to those of the previous surveys reveals a degree of correspondence between them in the number of settlements occupied in each period from the Chalcolithic period to the Middle Islamic period (see Table 3). Specifically, the regions of Umm Hadhar Plains (أم حذر), the southern Jordan Valley, and the modern city of

Table 1: Frequency table and pie chart for the archaeological sites by type.

Site Type	<u>N</u>	%	
City/Village	41 (14)*	18.98% (33.33%)*	
Circular Watchtower	60 (9)	27.78% (21.42%)	
Cistern/Cuphole/Dam/Quarry	20 (4)	9.26% (9.52%)	
Buildings/Wall Lines	50 (3)	23.15% (7.14%)	
Cave/Camp Site/Sherd Scatter	17(5)	7.87% (11.90%)	
Cemetery/Monastery	14(0)	6.48% (.00%)	
Watermill	14 (7)	6.48% (16.67%)	
Total	216 (42)		

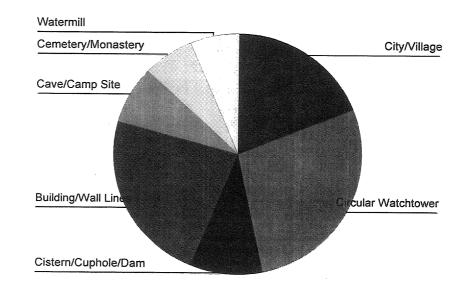


Table 2: Frequency table and pie chart for the archaeological sites by position on slope.

Location Type	N	%
Hilltop/Upper	101 (20)*	46.76% (47.62%)*
Middle/Lower	83 (13)	,
Valley Bottom		13.89% (19.05%)
Plain	2(1)	93% (2.38%)
Total	216 (42)	
*(): The number and p in 2000.	roportion of sites t	hat were surveyed
Plain		
Valley Bottom		

Table 3: Chronological distribution of the archaeological sites in the region of 'Ir $\bar{a}q$ al-Am $\bar{i}r$.

Chronology/Survey	2000	2000 Survey		1996-2000 Survey	
	N	%	<u>N</u>	%	
Chalcolithic/Early Bronze	9	21.43%	39	18.06%	
Middle Bronze	1	2.38%	4	1.82%	
Late Bronze	2	4.76%	5	2.31%	
Iron I	9	21.43%	18	8.33%	
Iron II	8	19.05%	35	16.20%	
Persian	6	14.29%	26	12.04%	
Hellenistic	15	35.71%	56	25.93%	
Roman	12	28.58%	29	13.43%	
Byzantine	13	30.95%	97	44.91%	
Early Islamic	3	7.14%	21	9.72%	
Middle Islamic	2	4.76%	19	8.80%	
Total	42		216		

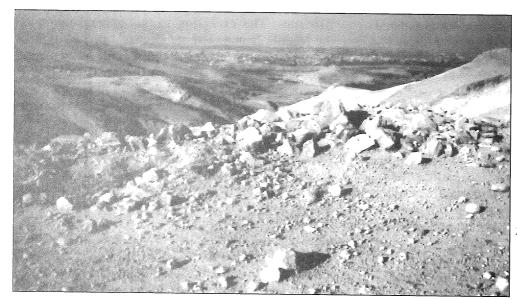
Wādī as-Sīr seem to have been densely populated during the Chalcolithic-Early Bronze I, Iron II-Persian, and Byzantine periods. The settlement was also dense during the Hellenistic period. Of the 42 sites recorded during the 2000 survey, six sites contained pottery sherds dated to the Chalcolithic and Early Bronze periods. Late Bronze II sherds came from two sites, whereas Iron I, Iron II, and Persian sherds were found at five, five, and four sites respectively. Nine sites produced Hellenistic pottery; five sites had Roman sherds. Important examples of Chalcolithic-Early Bronze remains are Tall Barakāt, Tall al-Ḥammām, Khirbat Shu'ayb, Tall al-Mustāḥ (تل المسطاح) and Tall Bulaybil. Iron II-Persian, Hellenistic, and early Roman evidence was pronounced at Khirbat as-Sīr, Tall Bulaybil, Khirbat Umm Farwa (خربة أم فروة), Tall Barakāt, Khirbat al-Habbasa, Tall at-Tāḥūnah (تل الطاحونة), Tall al-Hammām, Khirbat al-Bahhāth, and Khirbat ash-Shitā. Notice that all these early antiquity sites are clustered either in the Wadī Shu'ayb dam area or along the Wādī al-Kafrayn and the Wādī as-Sīr. On the other hand, Byzantine sherds came from seven sites; Early Islamic and Middle Islamic sherds were found at three and one sites respectively. This late antiquity pottery was particularly abundant at Tall al-Mustāh, Tall at-Tāhūna,, and Khirbat Sār. It is important to note that Tall al-Mustāh and Tall at-Tāhūnah are located on the low hills adjacent to the Jordan Valley and Khirbat Sar is situated within the municipal boundary of the modern city of Wadī as-Sīr, near the watershed point of Wādī ash-Shitā. The Wādī al-Bahhāth region lacks major Byzantine and Islamic sites.

The preceding observation may be sufficient to demonstrate that the Chalcolithic-Early Bronze I and Iron I-Hellenistic periods were periods of significant settlement in the regions of the Umm Ḥadhar Plains, Wādī al-Baḥḥāth, Wādī Shu'ayb, and Wadī as-Sīr. This fact stands in contrast with the area between the modern city of Wādī as-Sīr and Wādī ash-Shitā, an upper stream of Wādī al-Kafrayn, which was more densely populated during the Byzantine-Islamic period than in the earlier periods. This observation is more or less in harmony with the results of the previous fieldwork along the Wādī as-Sīr and the Wādī al-Kafrayn, and hence, the lead author's prior discussion of ancient settlement patterns in the vicinity of 'Iraq al-Amīr still seems tenable (Ji 1998a). Despite the sub-regional differences in occupational pattern, however, suffice it to say that the regions of 'Iraq al-Amīr and Wādī al-Kafrayn as a whole continued to experience some level of prosperity from the Chalcolithic to the Islamic periods, as evidenced by more than

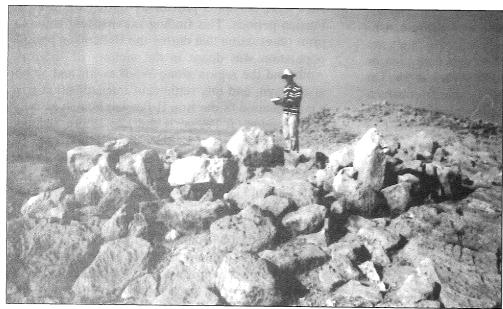
216 sites. The exception to this generalization is the Middle Bronze II-Late Bronze I period; up till now there is no evidence for specific settlements dated to this period. The Late Bronze II and Iron I periods appear to represent a transition period from this occupational gap to the Iron II-Early Roman settlement intensification.

Given the importance of 'Iraq al-Amīr to the Iron II-Hellenistic history in Jordan, let us address a couple of key findings related to the Iron II-Hellenistic period and their historical implication for the Tobiads at 'Iraq al-Amīr. First, in view of the 2000 survey results, it seems clear that in the areas of the Wadī al-Kafrayn dam, the Wadī Shu'ayb dam, and the Wādī al-Bahhāth, the Hellenistic period witnessed the greatest density of population and settlement, and many of the Hellenistic sites were occupied previously during the Iron II-Persian periods. This finding is consistent with our prior observation that during the Hellenistic period, population was dense in the vicinity of 'Iraq al-Amīr and the region along Wādī as-Sīr and Wādī al-Kafrayn, and this settlement intensification was a continuation of the Iron II-Persian human activity in the region (Ji 1998a; Ji and Lee 1999). Second, principal reasons for this long-term Iron II-Hellenistic settlement intensification along Wādī al-Kafrayn and in the Wādī Shu'ayb dam area are very likely to be the influence and prosperity of the Tobiads at 'Irāq al Amīr. According to some recent archaeological studies on the Tobiads, the regions of Wādī al-Kafrayn and Wādī Shu'ayb need to be treated as a continuation of the settlements in the Irāq al Amīr region. Besides, the Persian and Hellenistic dwellers of the 'Iraq al Amīr region, most likely the Tobiads, were possibly involved in building settlements for strategic and commercial purposes in the given areas along Wādī al-Kafrayn and Wādī Shu'ayb (Ji 2001). On the basis of archaeological and historical evidence, it also now seems reasonable to suggest that the onset of Tobiad habitation at 'Irāq al Amīr happened no later than the late Iron II, and in the early Hellenistic period, the principality of the Tobiads was already long established at 'Irāq al Amīr (Ji 1998b). Put together, the results of the 2000 survey of Wādī al-Kafrayn and Wādī Shu'ayb offer strong empirical evidence for the view that the region experienced a great density of population during the Iron II-early Hellenistic period, and this dense occupation was closely related to the prosperity of the Tobiah's habitation at 'Irāq al Amīr.

Third, in this vein, one interesting finding from the 2000 survey is the concentration of large late Hellenistic settlements in the Umm Hadhar Plains



2. A watchtower-like structure at Survey Site 187 (looking southeast).



3. A watchtower-like structure at Survey Site 188 (looking southeast).



4. A watchtower-like structures at Survey Site 190 (looking southwest).

and its immediate vicinity. Examples are Tall Barakāt, Tall al-Ḥammām, Tall aṭ-Ṭāḥūnah, and possibly Khirbat al-Habbasa. Related to this finding is the evidence from Rujm Umm Hadhar South (حجم) in the Umm Hadhar Plains, which ap- أم حذر الجنوبي pears to be a fortress or fortified villa built originally in the mid second century BC and used through the early first century BC (Ji and Lee 1999; Waheeb 1997). In a recent paper, the authors have presented in detail the archaeological and historical significance of these sites and the Umm Hadhar Plains to the study of transition from the Hellenistic period to the early Roman period in Jordan (Ji and Lee forthcoming). Hence, the readers may refer to this paper for a more detailed discussion of the Umm Hadhar Plains and its vicinity. To recapitulate some important points on the region and the late Hellenistic period, however, in the 'Iraq al-Amīr region many Iron II-early Hellenistic sites were likely to have been abandoned at the beginning of the late Hellenistic period, although many of the sites were resettled by the early Roman period, following a brief occupational hiatus (Ji 1998a; Ji and Lee 1999; P. Lapp 1962; 1963; N. Lapp 1983). In view of this potential absence of prominent late-second-century Hellenistic sites outside of the Umm Hadhar region, the frequent appearance of late-second-century pottery in the Umm Hadhar Plains and its vicinity may imply that the Umm Hadhar region was inhabited during the late second century BC, and thus, its human resettlement slightly antedated other late Hellenistic settlements along Wādī al-Kafrayn and Wādī as-Sīr.

Description of Selected Sites

1. The Wādī al-Kafrayn and the Wādī Shu'ayb Dam Region

Tall Barakāt تل بركات (Survey Site 178; PG: 213.87/ 140.08): Tall Barakāt is situated at the southern end of the ridge which forms the western side of the Umm Ḥadhar Plains, about 200m west of the Wadī al-Kafrayn dam. This site appears to have been a large walled settlement overlooking the Wādī al-Kafrayn and the southern Jordan Valley. The spur on which Tall Barakat stands commands a remarkable strategic view over the surrounding areas. Tall Barakāt was visited by Prag and Barnes (1996), and they provided detailed description of the site. According to our survey, Tall Barakat consists of three parts: an Early Bronze city on the northwestern part of the site, a smaller later citadel on the southeastern part, and another citadel at the eastern end of the site (see Figs. 5-7). Specifically, on the

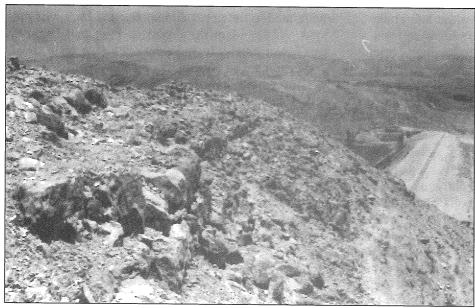
northwestern part, we observed the remains of enclosure walls associated with Early Bronze pottery. Several ancient buildings were found to be associated with the enclosure walls near the acropolis of the Chalcolithic-Early Bronze settlement, one of which seems to have been an about 7 x 9m house divided into two rooms by a compartment wall. In addition, we noticed that the lower course of walls of a roughly triangular-shaped citadel was clearly discernible for over 100m along the southern sides of the site. The external defense walls measure approximately 1.5m thick. These walls must represent "the upper citadel of the Roman fortress" of Prag and Barnes, who describe the upper citadel as "narrow and triangular" with retaining walls, possibly fortification walls, which "were constructed to the north and south to extend and retain the structures at the top" (1996: 56). Situated on the eastern terrace of this site is a rectilinear citadel that must be related to the upper citadel situated on top of the spur. As stated in the report of Prag and Barnes, this lower citadel includes an enclosure wall, towers, cisterns, and aqueducts.

During the survey of Prag and Barnes (1996: 59), a small number of Roman and Byzantine pottery was reportedly collected plus a large number of Early Bronze pottery sherds. Not surprisingly, Chalcolithic-Early Bronze pottery dominates our survey pottery assemblage from the northwest part of Tall Barakāt suggesting an Early Bronze Age occupation of this site. At the east side of Tall Barakāt, however, the survey team found several diagnostic late Hellenistic-early Roman pot sherds plus possible Byzantine body sherds. This ceramic evidence indicates that "the Roman fortress" of Prag and Barnes may be renamed to the "late Hellenistic and early Roman fortress" and reassigned to the late second and early first centuries BC (see Ji and Lee forthcoming for the late Hellenistic and early Roman numismatic evidence from Tall Barakāt, which confirms the results of our preliminary pottery analysis).

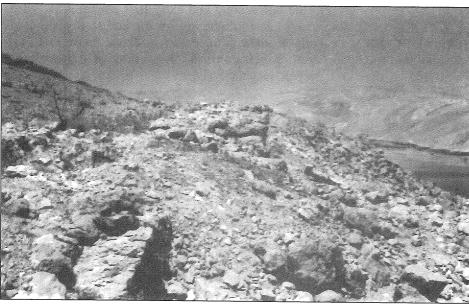
Khirbat al-Ḥabbasa خربة الحبّسة (Survey Site 180; PG: 214.43/139.18): Khirbat al-Ḥabbasa is a fortification site about 800m east of Tall Barakāt and about 500m northeast of Tall al-Ḥammām. This site is situated on an isolated summit of the hill that overlooks Tall al-Ḥammām, the warm springs near al-Ḥammām, and the southern Jordan Valley. Prag and Barnes (1996) visited Khirbat al-Ḥabbasa and published a detailed description of the fortress. This site also appears in Glueck's survey report (1951: 384), yet he did not visit the site. We saw Khirbat al-Ḥabbasa essentially as Prag and Barnes



5. The Early Bronze Age settlement area on the northwestern part of Tall Barakāt (looking south).



6. The Late Hellenistic and Early Roman upper citadel at Tall Barakåt (looking east).



7. The Late Hellenistic and Early Roman lower citadel at Tall Barakāt (looking north).

described it except that there are many more discernible compartment walls inside the rectangular building at the upper citadel than presented by Prag and Barnes. At the upper citadel, Prag and Barnes discerned the line of a main enclosure wall, two lines of compartment walls inside the enclosure wall, and the substantial retaining walls on the slopes just below the citadel. The original upper citadel appears to have been at least 4m high above bedrock. The lower citadel encloses an area of 4150m sq, and the area inside the enclosure wall consist of a series of terrace walls, various building remains, and water storage facilities. As illustrated in the study of Prag and Barnes, there are ancient aqueducts which brought water to the cisterns in the lower enclosure from the plateau to the east.

Given the systematic survey of Khirbat al-Habbasa by Prag and Barnes, the survey team centered its efforts on the collection of pottery. Prag and Barnes found a small amount of pottery dated to the late Hellenistic-early Roman and late Byzantine-early Islamic periods. As Prag and Barnes stated, pottery was very sparse on the surface. The survey team collected only two diagnostic sherds possibly dated to the late Hellenistic and early Roman periods plus a small number of body pot sherds.

Tall Bulaybil تل بليـــبل (Survey Site 181; PG: 210.52/146.30): Tall Bulaybil is located on a natural rise approximately 200m north of the Wādī Shu'ayb dam, near the confluence of Wadī Juray'ah (وادى جريعه) into Wādī Shu'ayb. Situated on top of a high hill, Tall Bulaybil dominates the approaches from the Jordan Valley to the Juray'ah Valley and the Jordanian Plateau via Wādī Shu'ayb. The summit of Tall Bulaybil is flat and rectangular (Fig. 8). Unfortunately, the summit of the site has largely been bulldozed and cleared by military activities, and now a military trench and associated installations surround the summit. This hilltop currently includes no visible ancient building remains. According to the survey, however, part of the defense walls which once enclosed the entire site are discernible around the site, particularly on the eastern side. The survey team identified two to three defense walls on the eastern slope, which probably indicate that Tall Bulaybil was fortified at least twice in different periods. The latest defense system seems to have included several square or rectangular towers, one of which was measured and documented by the survey team. This tower is about 6m by 12m, and still remains standing about 1m high. It was solidly constructed of limestone blocks with walls measuring about 1m

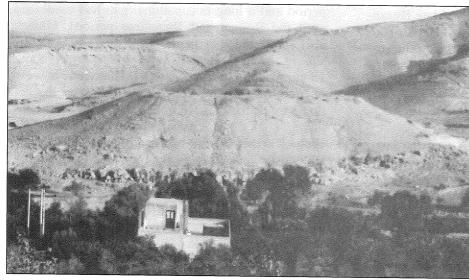
thick. This observation is in line with Glueck's analysis of aerial photographs (1951: 370) which led him to suggest that in ancient times, Tall Bulaybil was protected by a fortification system. The most noticeable structure at Tall Bulaybil is a potential gate system associated with a tower and a staircase leading up to the tower (Fig. 9). This gate system is located on the southern slope of the site, and the staircase was about 6m wide and probably included more than 20 steps.

There is an abundance of pottery at this site, plus several natural caves between the site and Wādī Shu'ayb. At Tall Bulaybil, Glueck (1951: 370-371) collected numerous Iron I-II sherds plus a small number of Roman and Byzantine fragments, yet he "found no Bronze Age sherds whatsoever on this site". On the basis of this result, he gave weight to the identification of Tall Bulaybil as biblical Beth-Nimrah. Glueck further pointed out that Tall Bulaybil had been abandoned after the Iron II period and a long occupational gap had continued until the Roman and Byzantine periods. Glueck also suggested that in the Hellenistic period, the site of biblical Beth-Nimrah was moved about 1.5km to Tall Nimrīn (تل نمرين). This view, however, may be now subject to revision given the ceramic evidence that we noted at the site; Tall Bulaybil was a thriving urban center during the early Hellenistic period and was resettled during the late Hellenistic and early Roman periods. The survey team collected Early Bronze, Iron I, Iron II, Persian, Hellenistic, and late Hellenistic-early Roman pottery sherds. The Iron II and Hellenistic sherds dominated the pottery assemblage.

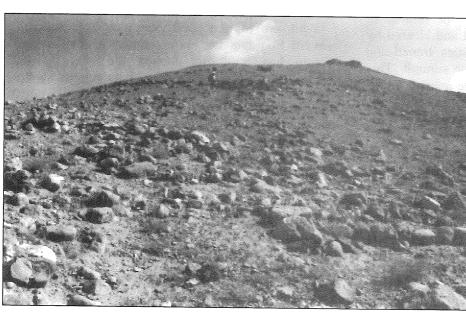
Khirbat Shu'ayb (خربة شعيب) (Survey Site 183; PG: 211.43/146.27): Site 183 is a completely ruined site on a ridge, approximately 1km east of Tall Bulaybil, providing a good view over Tall Bulaybil, Wādī Shu'ayb, and Wādī Juray'ah. The survey team has arbitrarily named the site, Khirbat Shu'ayb. The defense wall, which encloses the entire site, is about 2m thick and still stands up to about 2m high (Figs. 10, 11). Four rooms flank the northern side of the defense wall, each of which measures about 3m by 6m. The site appears to have been partitioned into four sections by three walls built in the direction of east and west. Three round structures of different sizes were observed along the western defense wall, which seems to have been originally built as part of the defense system. Two additional building remains are visible near the southern end of this site, probably used for residency or storage. There is one possible Chalcolithic or Early Bronze tomb on the western side of this site, and the survey team collected numerous pot sherds in and around this tomb. The pottery sherds from Khirbat Shu'ayb are assigned to either the Chalcolithic-Early Bronze period or the Persian-Hellenistic period.

Tall al-Ḥammām (ال المحارة) (Survey Site 186; PG: 213.93/138.74): Tall al-Ḥammām, one of the largest ancient ruins in the Jordan Valley, provides a commanding view of the approaches from the Ghawr to the Wādī al-Kafrayn (Fig. 12). It is located approximately 400m south of the Wādī al-Kafrayn dam. Glueck (1951; Khouri 1988: 76) identified this site as biblical Abel Has-Sittim where Joshua and the Israelites had camped before crossing the Jordan River. The hilltop of this site must have been a fairly flat, platform-like area before modern military activities disturbed it (Figs. 13, 14). Although the summit of Tall al-Ḥammām was badly destroyed by the military in the recent

past, various wall lines are still clearly visible in places (Figs. 13, 14). Given the evidence of surface remains, the summit of this site must have been fortified by defense walls, and this view is clearly in accord with Glueck's observation (1951: 379) that there are "the remains of a large and originally very strongly-built Iron Age I-II fortress". According to our survey, there are two separate discernible courses of defense walls, showing that this settlement was fortified at least twice in different periods. The enclosing walls are at least 1.5m thick, according to the visible remains on the surface, and some of them survive up to two to three courses high. The northern end of Tall al-Hammām consists of several rooms, all of which abut the northern fortification wall. This structure must be one of "the massive towers" in Glueck's description. A similar structure is found along the eastern city wall. The survey team also observed



3. General view of Tall Bulaybil (looking west).



9. A potential gate system and a staircase leading up to the city at Tall Bulaybil (looking northwest).

fragments of walls of a couple of other buildings in the central part of the site, and at least one large building complex has survived at the southern end of the site. All these buildings seem to have been the remains of strongly-built public and private houses. This finding indicates that the area inside the fortification walls was once occupied by a large number of houses and other buildings.

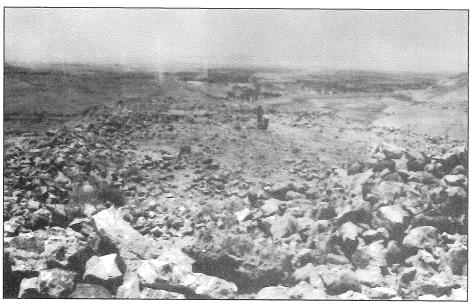
As the southwestern end of the summit has been completely bulldozed, it is impossible to trace the plan of architectural remains. Regarding this area, Glueck (1951: 379) writes that the southwestern end of the hilltop "forms an elevated platform, separated from the rest of the enclosed area by a crosswall. This raised section, which culminates in the two towers at the s. w. end, is about 33m long and about 17m wide, and seems to form an inner citadel". Given the presence of some faint wall lines,

Glueck's description seems to be relevant and accurate. Glueck's description continues, "There are traces of a strong glacis built against the tower at the n. e. end. Extensive clearances might reveal the presence of a glacis built against the entire outer fortification wall".

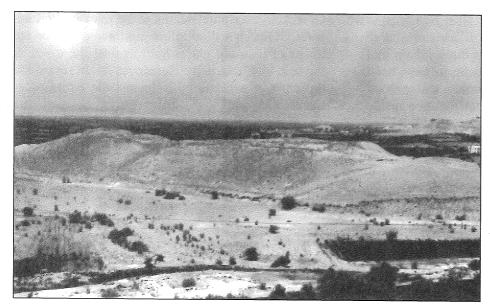
To the west of the summit of Tall al-Ḥammām is a lower *tall* that Prag (1991) made a systematic contour survey of in 1990. At the same time, Prag undertook an excavation of part of the Early Bronze Age settlement at the lower *tall*. As Prag (1991: 65) states, "The surface of the lower tell is covered with stretches of walls and rectangular structure. Most of the walls are between 50 and 80 cm wide....the size of the walled settlement on the lower tell, c. 300 x 340m". Prag dates the remains at the lower *tall* to the Early Bronze I-III periods and the transition from Early Bronze to the Middle



10. The western fortification wall and buildings on the northern part of Khirbat Shu'ayb (looking northeast).



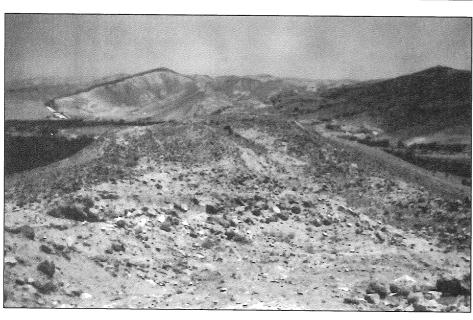
11. A large empty courtyard on the central part of Khirbat Shu'ayb (looking southwest).



12. General view of Tall al-Ḥammām (looking southwest).



13. The southern half of the summit at Tall al-Ḥammām (looking southwest).



14. The northern half of the summit at Tall al-Ḥammām (looking northeast).

Bronze period.

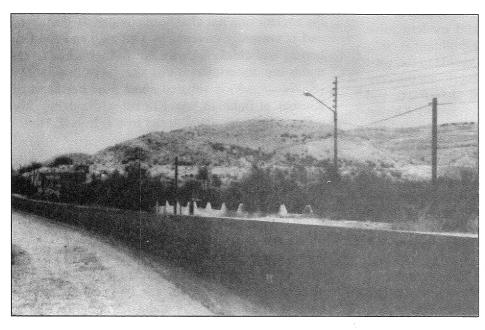
Glueck (1951) found a large number of Iron I-II sherds along with some scattered Early Bronze I, Roman, and Byzantine sherds. The Jordan Valley survey team reported the presence of Early Bronze, Middle Bronze, Iron I-II, and Early Islamic evidence at the site (Yassine, Ibrahim and Sauer 1988). The survey team collected Early Bronze, Late Bronze II-Iron I, Iron II, Persian, Hellenistic, Roman, and Byzantine pottery.

Tall at-Tāhūnah (تل الطاحونة) (Survey Site 192; PG: 213.95/139.33): Approximately 400m north of Tall al-Hammām is a relatively small ancient site that is being destroyed by modern farming and building activities (Fig. 15). Given that this site occupies a relatively high hill near the Wadī al-Kafrayn dam, it has an excellent view of the entire southern Jordan Valley and many ancient cities in the area such as Tall al-Kafrayn, Tall Barakāt, Khirbat al-Habbasa, and Tall al-Hammam. We identified remains of a roughly square fortress measuring roughly 30 x 30m at the acropolis of this site, which may have been built with four towers at the corners. Two of the four towers are found on the northern side of the fort, although it is not impossible that these tower-like structures represent an earlier structure below the square edifice. This structure must correspond to Glueck's "foundation remains of a large building, oriented n.-s., and measuring about 25 by 18m" (1951: 384). A couple of wall lines are discernible south of this square structure, yet the nature of these wall lines is not clear. This site is marked by the remains of a late Ottoman watermill, situated on the southeastern slope of this site, which is comprised of several rooms and a water conduit.

Glueck (1951) found a small number of Byzantine and Islamic pottery sherds; the Jordan Valley survey (Yassine, Ibrahim and Sauer 1988) yielded Early Bronze, Middle Bronze, Late Bronze, Iron II-Persian, early Roman, and Early Islamic. According to our survey, pottery is abundant on the site; our survey yielded Chalcolithic-Early Bronze, Hellenistic, early Roman, Byzantine, and early Islamic pottery on the surface.

Tall al-Mustāḥ (تل المسطاح) (Survey Site 193; PG: 210.08/145.30): Tall al-Mustāh, situated 1km south of Tall Bulaybil on the south bank of Wādī Shu'ayb, occupies a strategic position, overlooking the confluence of Wadī Juray'ah and Wadī Shu'ayb and controlling the entrance to the Juray ah Valley as well as the perennial water sources along the Wādī Shu'ayb (Khouri 1988: 73) (Fig. 16). Glueck (1951: 368) visited this site during his Transjordan survey, and described Tall al-Mustāh as "a large, sharply defined, flattish-topped, truncated, wedge-shaped tell". Presently, Tall al-Mustāh includes a large visible rectangular structure measuring about 15 x 25m, partially destroyed by military trenches and road building. The vague outlines of a couple of partition walls are also discernible in this building. The survey team collected about 30 tesserae along the eastern wall of this structure, possibly indicating this building was an ancient church. The ancient remains of this site, except for this rectangular structure, are now completely destroyed and cleared by military, agriculture, and road-building activities.

Glueck (1951) assigned Tall al-Musṭāḥ to Early Bronze I; the Jordan Valley survey team (Yassine,



15. General view of Tall aṭ-Ṭāḥūnah (looking northwest).



 General view of Tall al-Muṭāḥ (looking northwest).

Ibrahim and Sauer 1988) found Early Bronze I-III and Byzantine sherds. According to our survey, at Tall al-Musṭāḥ, late Byzantine and early Islamic pottery dominates the ceramic assemblage, and this pottery is scattered around the rectangular structure and on the southern and western slopes of the site. Meanwhile, Early Bronze potsherds and flints centered on the low hill west of the rectangular structure. Our ceramic corpus is comprised of Early Bronze, Byzantine, and early Islamic sherds.

2. The Wādī al-Baḥḥāth,Wādī ash-Shitā and Wādī as-Sīr Region

Rujm al-Buḥayra (رجم البحيرة) (Site 194; PG: 223.41/143.70): This medium-sized site is on a natural terrace on the northern bank of Wadī al-Baḥḥāth, an upper stream of Wādī al-Kafrayn, currently occupied by a cemetery and modern olive and fig orchards. A large Ottoman building at 'Irāq al-Amīr Survey Site 59 is clearly visible to the west from this site. Rujm al-Buḥayra overlooks the confluence of Wadī as-Sīr and Wadī al-Kafrayn, and the approaches from Wadi al-Kafrayn to Khirbat ash-Shitā and Nā'ūr (ناعور). The surface wall lines are faint, but the survey team could identify outer walls of two rectangular buildings, one of which had been built on top of the other. The earlier structure is roughly square, measuring 20 x 20m, and is slightly larger than the later one. Building ruins cover an area of ca. 40 x 50m, and several circular structures spread over the site. The villagers call this site Maqbarat al-Buhayra (مقبرة البحيرة : Cemetery of al-Buhayra) because of a large number of graves that dot the northern part of the site. Studies of surface pottery indicate that this site was settled

in the Chalcolithic-Early Bronze, Late Bronze II, Iron I, and Hellenistic periods.

Khirbat al-Baḥḥāth (خـربة البـحــاث) (Survey Site 195; PG: 225.98/145.78): Khirbat al-Baḥhāth is a medium-sized ruin on the southern bank of Wādī al-Baḥḥāth. approximately 50m southwest of the confluence of Wadī ash-Shita and Wadī al-Baḥḥāth. The vague outlines of a potential city wall or a large building are discernible in the midst of numerous graves which spread over the entire site. The large building measures at least 9 x 19m, and some of its intact walls are about 1.4m thick. The walls are currently standing three to four courses high. Another wall line is identifiable about 5m south of this structure, yet the nature of this wall line is not clear. The eastern and western part of the ancient ruin has also been completely destroyed and is currently covered by Ottoman and modern houses and chicken farms. No further building remains are discernible at this site. 'Ayn al-Baḥḥāth (عين البحّاث) is situated about 50m northeast of Khirbat al-Baḥḥāth. At Khirbat al-Baḥḥāth, we collected pottery dated to the Iron I, Iron II, Hellenistic, and Byzantine periods.

Khirbat ash-Shitā خربة الشتا (Survey Site 209; PG: 226.05/146.90): Khirbat ash-Shitā is a currently-occupied village that is bisected by a road from the city of Wādī as-Sīr to 'Irāq al-Amīr via Wādī ash-Shitā. Although abandoned modern brick houses and modern concrete houses cover most of this ancient village, part of one ancient building is clearly discernible under one of the late Ottoman brick houses. The wall line is about 2m long and 80cm

thick, standing 30cm high. Except for this early evidence, no architectural remains are visible on the site. Currently, the northwestern part of this site is covered by a cemetery. The survey team also noticed one cuphole (30cm in diameter) carved into a detached limestone block, about 10m south of the early wall line. There is a strong water spring called 'Ayn ash-Shitā (عين الشتا), about 200m northeast of this site. We collected a small number of diagnostic pottery from Khirbat ash-Shitā, all of which are attributable to either the Hellenistic or Byzantine eras.

Khirbat Sār (خصرية سار) (Survey Site 210; PG: 228.60/150.40): Khirbat Sar is located in the eastern part of the modern city of Wādī as-Sīr, at the western edge of the Jordanian Plateau overlooking the head of Wadī ash-Shita. Glueck (1939: 153-155) visited this site and described a plan of the visible architectural remains in detail. Our investigation of Khirbat Sār shows that it remains largely intact since Glueck visited the site in the 1930s. The primary structure is a massive ruined rectangular building, possibly a temple, associated with two rows of arches. Glueck defined this structure as an Ammonite "qasr". According to our measurements, this structure is approximately 16m (north-south) and 17m (east-west), which is smaller than Glueck's measurement (19.8 x 20.0m). The walls are about 3 to 7 courses high (ca. 5m), and approximately 3m thick. The eastern side of this rectangular building is faced by a large courtyard measuring approximately 15.5 x 21.5m with two parallel rows of arcosolia on its south (6 arches) and north (5 arches) sides. Recall that according to Glueck (1939: 155), there were seven arcosolia on both sides of the courtyard and the arcosolia "were backed up by a wall, which in effect formed a continuation of the lines of the n. and s. walls of the qasr". Currently, the southeastern end of this courtyard, although buried under debris, is faintly discernible. On this side, however, we observed only six arcosolia, which disagrees with Glueck's illustration. Outside of these arcosolia are several wall lines, and one of them seems to form a continuation of the walls of the rectangular building. There are at least two to three large building complexes on the eastern and southern areas of the site. A large number of walls are clearly discernible on the surface, yet it is virtually impossible to trace the exact plan of the buildings. Glueck mentioned that there were remains of a small reservoir on the northeast side of the site. In the meantime, however, modern cultivation around Khirbat Sar has either destroyed or covered the reservoir, since it is no longer visible at this site.

Glueck dated the main rectangular structure to the Iron I-II period, yet his dating is quite far from convincing since we failed to collect any Iron Age pottery at Khirbat Sar. In this vein, notice that Glueck's dating of this building is primarily based on the typology of the structure rather than the pottery associated with it. Glueck (1939: 155) stated: "from the construction of the main building, with its huge blocks, laid at the corners in headers and stretches, we feel certain, even without really adequate pottery evidence, that it was originally built in the Early Iron Age". Glueck continued, "Although the nature of its construction alone led us to believe that it had to be assigned to the Early Iron Age, the discovery of similar sites with indubitable ceramic evidence enables us to attribute it certainly to EI I, with its history continuing down into EI II". Glueck reportedly collected Roman, Byzantine, and Islamic sherds in addition to a small quantity of Iron Age sherds. We found only late Hellenistic, early Roman, Byzantine, early Islamic, and middle Islamic ware on the site, strongly indicating that the buildings at Khirbat Sar belong to the periods later than the Iron Age.

Khirbat Umm Farwa (خصرية أم فصرية) (Survey Site 214; PG: 223.41/150.21): On this small site is a modern village with several late Ottoman block houses built on a low rocky knoll by 'Ayn Farwa (عين فحرية), roughly 1km north of al-Baṣṣa (البصة) and 3km northeast of 'Irāq al-Amīr. This site has a relatively heavy scattering of potsherds in addition to at least four caves that were most likely used for residence and storage in antiquities. There is some evidence of quarrying as well. One possible ancient wall line, visible under a late Ottoman house, measures 2m long and 1m thick. The survey team collected five grinding stones on the surface. At Khirbat Umm Farwa, we collected Iron I, Iron II-Persian, and Hellenistic pottery.

Khirbat as-Sīr (خربة السير) (Survey Site 216; PG: 227.00/151.72): Khirbat as-Sīr is a large ancient ruin at the head of Wādī as-Sīr, which is now almost completely bulldozed and cleared in order to build terraces for horticulture and olive orchards. Given the size of the bulldozed area and a heavy concentration of potsherds, Khirbat as-Sīr must have been a thriving ancient village that occupied much of the hill. Despite intensive modern activities, there are some ancient building fragments and several stone heaps which dot the site. Near the potential acropolis of Khirbat as-Sīr are the remains of a rectangular building that was constructed from

small to medium stones. The building measures at least 6.5m (north-south) by 17m (east-west), and the walls are best preserved at the northwest corner where it stands up to two courses high. Approximately 10m east of this building is another rectangular structure, measuring 7.2 x 8.7m, which includes a couple of inner partition wall lines amid rock tumble. It is probable that the remains of this building were originally part of one large building complex. Situated about 20m northeast of this building complex is a third potential ancient building whose eastern wall measures 15m long in the north-south direction. The survey team could not trace the remainder of this building further because of rock tumble which covers an area of about 15 x 20m. On the northeast side of the site, a scatter of foundation walls and stone heaps indicate the presence of additional buildings and installations, where the survey team successfully identified at least two wall lines amid the stone tumbles and heaps. Both wall lines measure about 5m long in different directions, yet it is obvious that these walls belong to one large building. On the south side of the site, virtually nothing remains to indicate ancient buildings.

At Khirbat as-Sīr, we found a seal impression engraved on a jar handle, which was studied subsequently by Jürg Eggler. According to the lead author's conversation with Eggler (March 22, 2001), in the impression is a tree with a jutting jagged tree-top flanked by two standing figures. This motif is a variant of the early Iron Age theme of the tree-cut, typically dated to late Iron I and Iron II (1075-900 BC). Apparently, Eggler's dating of the seal impression is compatible with the pottery that we found on the surface of the site. We collected a large number of pot sherds, all of which were attributed to the periods of Late Bronze II, Iron I, Iron II, Persian, or Hellenistic.

Conclusion

Thanks to the three seasons of systematic survey of the 'Irāq al-Amīr region, we are now quite well informed as to the chronological distribution of ancient settlements in the region and their geographical extent. Besides, as a result of the surveys, several facts of settlement patterns and history in the region, including their implication for the study of the Tobiads, can be presented. The primary concerns of this preliminary report, however, were to present archaeological finds from the 2000 survey and report the result of preliminary analysis of the finds. Given that detailed studies of pottery, architectural remains, and artifacts from the survey are still underway, a more systematic presentation of

the data covered in this report will be available to the readers in due course. Also, not intended to be a historical analysis of archaeological findings, this report has offered a rather limited integrative perspective of the historical importance of the survey results.

To conclude, three seasons of archaeological survey in the region of 'Iraq al-Amīr and Wadī al-Kafrayn have produced new evidence for examining the nature of settlement in this region from the Chalcolithic to the Islamic periods. In light of the survey results, the Chalcolithic and Early Bronze periods appear to have been an era of significant settlement in the survey region; the evidence of this early period of human occupation is extensive and dense, particularly along Wadī as-Sīr and Wādī al-Kafrayn. The survey area also includes a large number of Chalcolithic and Early Bronze burials, as demonstrated in the previous papers on the dolmens and rock-cut chamber tombs in the vicinity of 'Irāq al-Amīr (Ji 1997; Loh and Ji 2000). The Ir , II-Hellenistic and early Roman periods are well represented in the surveys as well. It seems apparent that the number of occupied sites in the regions of 'Irāq al-Amīr andWādī al-Kafrayn rose dramatically during the Iron II period after a long occupational abatement, and this settlement intensification continued into the Hellenistic period. In particular, the early Hellenistic period was one of the best represented periods of all historical periods in the region. This fact contrasts with the early Hellenistic settlement abatement in the Jordanian Plateau (cf. Ji 2001; Smith 1990; Tidmarsh 2001). The 'Irāq al-Amīr region also experienced substantial human activities during the Byzantine period, and its evidence is quite ubiquitous across different geographical segments of the survey area. This prosperity of 'Iraq al-Amīr and its vicinity appears to have been associated with the social and economic incline during the Byzantine period in the Jordanian Plateau and the Jordan Valley. To be sure, in Jordan, the Byzantine settlement intensification is well-established (cf. Boling 1989; Ibach 1987; Parker 1992). Islamic settlements were less extensive and confined mostly to the area in close proximity to the Jordan Valley and the modern city of Wādī as-Sīr. There is some evidence of Islamic settlements at 'Iraq al-Amīr and its immediate vicinity; yet, they are not impressive as compared to the earlier settlements in the area.

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