DAYR 'ALLĀ REGIONAL PROJECT: SETTLING THE STEPPE SECOND CAMPAIGN 2005[1]

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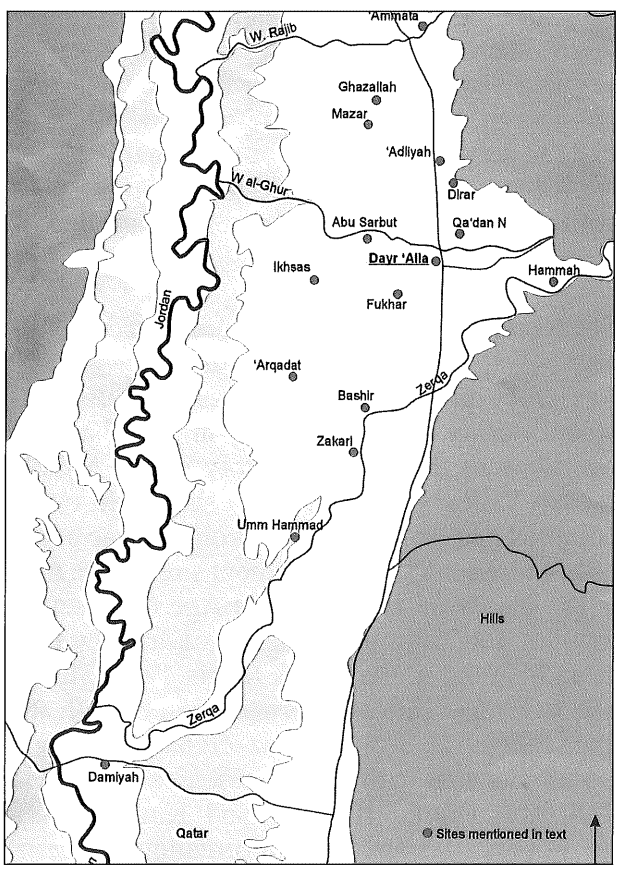
Introduction

The Dayr 'Allā Regional Project *Settling the Steppe,* directed by Gerrit van der Kooij (Leiden University) and Omar al-Ghul (Yarmouk University), conducted its second field campaign from 12 September to 30 October 2005[2]. The first field season in 2004 (Kaptijn *et al.* 2005), and preliminary results from the long-term archaeological study of Tall Dayr 'Allā[3] (*e.g.* van der Kooij 2001), have resulted in a view of the complicated varying intensity of use of the Middle Jordan Valley during the Bronze and Iron Ages. As precipitation is usually not sufficient for rain fed agriculture, the maintenance of a society in such an arid region involves large efforts, in the form of irrigation and other water management systems. Yet, the area has been almost continuously settled, though with varying intensity and diversity. This second season's fieldwork reflects the project's general search for a better and coherent understanding of these occupation cycles. By focusing on the landscape and settlement sites, several complementary studies cover the scientific tasks of the *Settling the Steppe* project (*e.g.* systematic survey work, detailed stratigraphic excavations, geographical-geophysical research and archaeobotanical analyses).

The research area is situated in the Jordan Valley between the Wādī Rājib in the north and the az-Zarqā' River with Tall Dāmiya in the south, comprising approximately 72km^2 (**Fig. 1**). This



1. Map of the Dayr 'Allā region.

1. Funding was provided by the Netherlands Organization for Scientific Research (NWO), the Yarmouk University, the University of Leiden and the Department of Antiquities of Jordan.
2. This second season, a team of 21 people took part in this interdisciplinary research project. The senior staff members were: Gerrit van der Kooij (LU director), Omar al-Ghul (YU co-director), Lucas Petit (LU Excavation), Eva Kaptijn (LU Survey), Nabil Qadi (YU excavation), Fouad Hourani (LU Geoarchaeologist), Muaffaq Batainah (YU surveyor) and Mariette Grimbergen-Driessen (House keeping and registration). The representatives from the Department of Antiquities were Ziyad Ghnaimat and Aktham Abbadi. Other team members: Jitske Blom, Fardoos Bardaghawi, Laura Crowley, Wafa Abu al-Hassan, Mohammad Jaradat, Annelies Koopman, Lizzy Polman, Samya Abed al-Rahman, Jeroen Rensen, Jonathan Sela, and Max van de Wiel.
3. It is a Joint Project of Leiden University (LU), Yarmouk University (YU) and the Department of Antiquities of Jordan (DoA).

region is usually regarded to be the southernmost extension of the regularly settled part of the Middle Jordan Valley. The two eastern tributaries of the Jordan River have been the only perennial water source for occupants settling the valley floor and are together with the non-consolidated alluvial sediments of the Ghawr, the main focus for describing and investigating irrigation systems and agricultural activities. Previous survey teams (Glueck 1951; Ibrahim *et al.* 1976, 1988) have presented overviews of the different tall sites in this region. No emphasis has, however, been placed on less obtrusive archaeological remains present within the countryside, nor on the relation between settlement sites and their catchment area. The current research therefore incorporates a systematic survey that focuses on a smaller region, making it possible to cover the area in greater detail. Note that the geographical division used in this article is clearly artificially defined and should not be considered as a representation of the past, in any form what so ever.

Settlement History of the Middle Jordan Valley[4]

Before presenting preliminary results collected during the field season in 2005, a brief overview of the settling history of the Middle Jordan Valley will be given to shed light on its complex and diverse nature. Probably one of the oldest archaeological settlement sites in the area is the dispersed Early Bronze Age (EB) settlement of Tall Umm Ḥammād, excavated by Betts and Helms in the 1980s (Betts 1992; Helms 1984, 1986). This site forms together with the excavations at Tall Abū az-Zīghān/Ḥandaquq South, located within our research area, and Tall Abū Ḥāmid (Dollfus and Kafafi 1988), an important source of information concerning Early Bronze Age occupation in the Jordan Valley. The results of these sites, together with the location of several other somewhat smaller settlements of the same period (Tall an-Nukhayl North, Tall al-Kharāba, Katārat as-Samrā) lead to the conclusion that this period contained well developed and organised farming communities, which made use of the available water sources in the close vicinity.

The situation changes completely during the Middle Bronze Age, as is illustrated by the absence of building features or infrastructures and by the camp-like dispersion of scattered pottery sherds (Katārat as-Samrā I, II, IV, al-Musaṭṭara, Dāmiya al-Jadīda). Large areas of the Jordan Valley seem to have been the home of more mobile groups. There is, however, one exception: Tall Dayr ʻAllā. Although only limited excavation has taken place, a relative large settlement was in use during the Middle Bronze Age IIc Period (van der Kooij and Ibrahim 1989). The character of this community, with hardly any other sedentary villages in its direct proximity, is puzzling.

The Late Bronze Age started with an increase in the number and intensity of settlements in the Middle Jordan Valley. Arts and crafts flourished and the influx of contacts and interactions seems to have made the Jordan Valley into a highly appealing area for settlers. The for the most part newly founded sites were dispersed randomly over the research area; near the foothills (Tall al-Ḥamma, Tall ʻAmmata, Tall Qaws), on the valley floor (Khirbat Buwayb, Tall Dayr ʻAllā, Tall Qaʻdān, Tall Abū Nijra, Tall Mazār, Tall Ghazāla) and on the Katār hills (Tall al-Kharāba, Tall an-Nukhayl South, Katārat as-Samrā I, III). The position of some of these farming sites in the Ghawr, not directly near a perennial water source, seems to point to the presence of some kind of irrigation system.

This settlement distribution pattern is similar to the situation in the succeeding Iron Age, though more and more sites were founded or resettled as time progressed (Tall Dāmiya, Tall Dayr ʻAllā, Tall Ikhṣāṣ, Tall Bashīr, Tall Zakārī, Tall ʻAdliyya, and Tall ʻAmmata, to name but a few). At the end of this period, the Iron Age rural society collapsed, due to political instability after the retreat of large entities like Assyria and Babylonia, and the area was now used chiefly by mobile pastoralists. It has been attested, in the few excavations of this area, that during the Persian and Hellenistic Period people used the higher summit of existing talls only for stocking their animals. For some time the valley seems

4. Most of the information presented here was taken from the survey work of Glueck (1951), the East Jordan Valley Survey (Ibrahim *et al.* 1976, 1988), van der Steen (2004) and settlement surface surveys carried out by the authors in May 2004. Please note that this overview should be considered as schematically and preliminary.

to be the backyard of the Levant, as shown by limited archaeological evidence of settling activities.

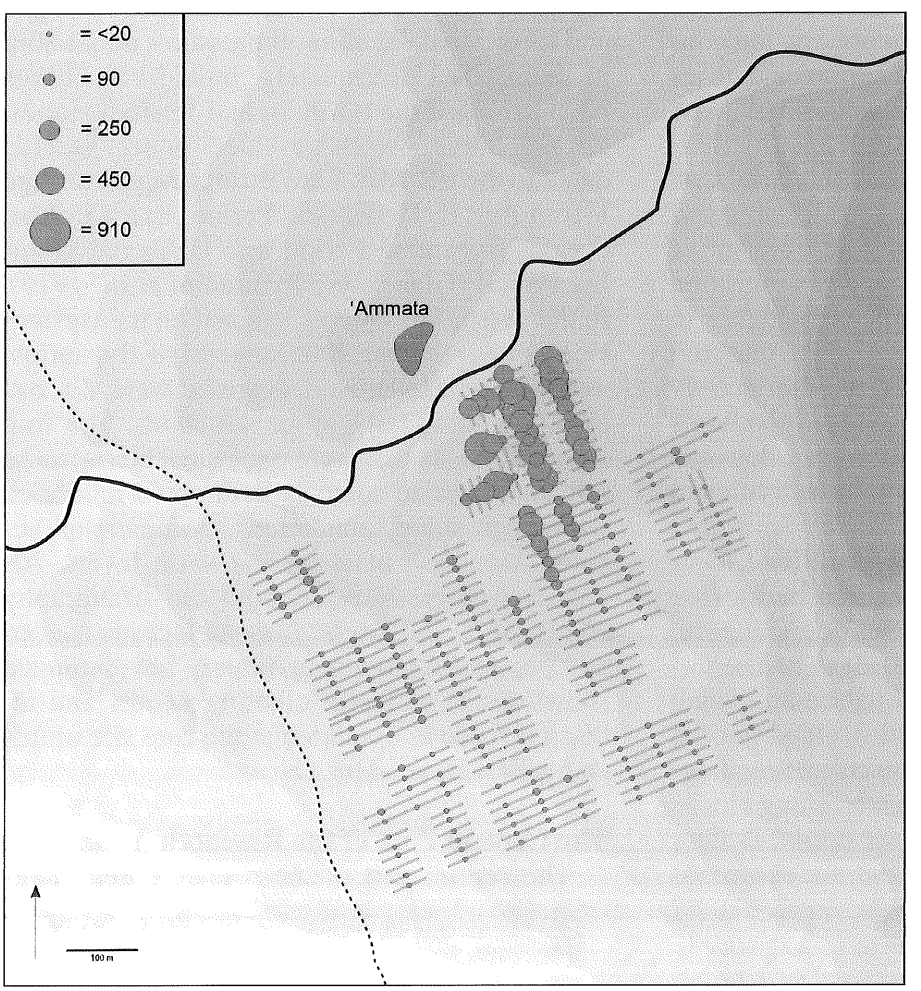
This situation changed at the moment the well developed agricultural and water management systems of the Romans were introduced. It caused an immediate increase in number of settlements in the Middle Jordan Valley (Tall 'Adliyya, Qa'dān South, Tall Abū Sarbūṭ, Tall al-Fukhār, Tall Shu'ba, Maflūq west, Tall an-Nukhayl and Tall al-Kharāba, Tall Dāmiya). However, there is a settlement gap between the flourishing Early Roman and the Byzantine Period, which is difficult to understand. The end of the Byzantine existence can be explained by desiccation between the 5th and 8th century AD. The limited annual rainfall could coincide with the collapse of the agricultural, water-harvesting Byzantine society and the Arab expansion into these areas (Enzel *et al.* 2003: 268).

Around the 9th century AD the region recovered and until the Ottoman Period many sites flourished and increased in size. Notable is the importance of sugar industry during the Ayyubid/ Mamluk Period. The remains of numerous water-driven mills were discovered, often associated with large quantities of sugar pot fragments (Tall Qaws, Tall 'Adliyya, Abū 'Ubayda, Tall Qa'dān, Dayr 'Allā village, Tall Abū Sarbūṭ, Baṣṣāṣ al-'Aqīl, Tall Abū Nu'aym, Tall Zakārī, and Tall al-Dūlātī).

The Northern Part of the Research Area

In the 2005 season work was started in the northern part of our research area. The excavations concentrated on Tall 'Ammata and the survey started just south of the tall on the southern banks of the Wādī Rājib (see **Figs. 1 and 2**).

Similar to the first season in 2004, the survey was executed by walking lines of 1m wide that were spaced 15m apart. Each line was divided into plots of 50m and all artefacts present on the surface were collected (see for methodological approach Kaptijn *et al.* 2005).



2. Plan of northern concentration showing sherd densities.

On the very first workday of the 2005 season the survey team immediately stumbled upon a significant concentration of pottery sherds. In one of the plots an astounding 906 sherds were found, giving 18 sherds per m^2. During the work it became clear that the sherd density decreased towards both the South and West (see **Fig. 2**). In the East, we were stopped by planted fields, before a noteworthy decrease in number of sherds could be seen. As the Wādī Rājib is located in between this concentration and Tall 'Ammata it is impossible that these high densities represent some sort of run off from the tall. Research of the local geography has corroborated this conclusion. It was therefore concluded that this concentration reflects the remains of a mother population buried in the subsoil.

Preliminary analysis of the pottery has dated the majority of the pottery to the Byzantine and Early Islamic Period. Significantly smaller quantities of sherd date to the Roman and Early Byzantine Periods. Few sherds could be dated to the Hellenistic Period and a handful stemmed from the Iron Age[5]. Apart from pottery, the concentration also yielded other material categories mainly in the form of mosaic stones and glass fragments. These finds show the same distribution pattern as the pottery. The flint artefacts, however, were found in a much wider area and did not show any clustering. The number of flints discovered and the ratio between tools and waste was, nevertheless, significantly higher in this extended area than elsewhere in the research area away from sites. Presently, the flint collection is being analysed in order to test hypotheses on this deviating flint distribution, *e.g.* does the flint distribution reflect agricultural activities in the fields?

Just west of the concentration described, there was an area that recently saw some bulldozing activity; two shallow holes were dug and earth and rocks were pushed to the edges of the terrain. Because of the damaged nature and small scale of the area, no plots were walked but the area was surveyed by randomly collecting diagnostic finds. Several large, hewn building blocks were embedded in the bulldozer dump. Pottery was discovered in significant but not enormous quantities. Furthermore, roof tiles were abundantly present, whereas they are virtually absent in the other survey areas. A few small slabs of polished marble and a small, geometrically sculpted piece of marble were found. Quite large quantities of small mosaic stones were found in comparison to the generally large mosaic stones of the concentration described above. The surface finds were complemented by the discovery of fragments of plain white mosaic floor *in situ* in the bulldozer cuts and a fragment of multicoloured tesserae in a geometric design still cemented together. The abundance and nature of the finds and the architectural features point to some kind of building, most likely dated to the Byzantine Period.

The important findings south of the Wādī Rājib were complemented by small excavation work at Tall 'Ammata, a settlement mound located on the other bank of the wadi. The site overlooks the fields to the south. It can be assumed that this higher location was contemporary with the lower city. Tall 'Ammata is oval in shape and its original flat summit measures about 80m in diameter. Unfortunately, bulldozer cuttings have damaged the northern and western slopes. Former survey work revealed pottery sherds dated to the EB-MB, Late Bronze Age, Iron Age I, Iron Age II, Hellenistic Period, Early Roman Period, Byzantine Period and Umayyad/Mamluk Period (Glueck 1951; Ibrahim *et al.* 1976). In the two 5x5m squares, opened on the western slope in September 2005, extensive Byzantine, Roman and Hellenistic deposits were discovered, including large stone structures. The Iron Age II deposits that were excavated below these remains revealed some superimposed mudbrick walls with stone foundations, occupational accumulation, ash material and wash layers. Although further study on both the stratigraphy and the different artefact assemblages is needed and planned for the near future, Tall 'Ammata shows a similar fast oscillating variety and intensity of use as exhibited at the core site of this study: Tall Dayr 'Allā.

The Central Part of the Research Area

The central part of the research area incor-

5. The utmost gratitude must be expressed to Drs. Philip Bes from the Catholic University of Leuven who assisted in the analysis of the pottery and gave his expert opinion on the Roman and Byzantine imports and tableware.

porates two zones dynamically different from a geomorphologic point of view. The first comprises the flat lands that are located between the bases of the escarpments and the Zawr; the escarpments and its wadi systems act upon this zone. The second zone is the az-Zarqā' main bed and its banks, which is subject to discharges of the river and its basin. Previous paleogeographical investigations in this region have shown that during the early Holocene both zones were interconnected (Hourani 2002). They formed large flooding plains, with marshlands in the lower areas of the central Ghawr. According to Hourani's investigations, the separation of the two systems occurred around 8000BP, when the az-Zarqā' incised itself deeper into the plain. However, occasional over bank depositions of the az-Zarqā' system and major wadis in the flat lands continued until around 4500BP.

On the basis of these results, we have started current geo-archaeological investigations in the zones connected to the az-Zarqā' system in order to investigate the paleogeographical development of the region during the second half of the Holocene. The natural profiles of the az-Zarqā' and of its small tributaries were thus surveyed from the entrance point of the river into the Jordan Valley Plain down to the site of Dāmiya, where the az-Zarqā' enters the River Jordan. This geological survey has preliminary identified two phases in the Holocene period: a younger terrace of yet unidentified age; deposits of this terrace were observed in several places, *i.e.* to the East of the village of Dibbab, down below the Early Bronze Age site of Tall Umm Ḥammād ash-Sharqī and near the confluence of the az-Zarqā' and the Jordan. And a middle terrace, stratigraphically located between the sections of the major incision of 8000BP and the occupational levels of Tall Umm Ḥammād. The same terrace can also be observed at certain locations along the western section of the az-Zarqā' between Umm Ḥammād and Dabbāb. Deposits of this terrace are stratigraphically equivalent to the red-brown loams that cover most parts of the middle Ghawr. However, the dark deposits dating to the early Holocene that can be found underneath the red brown loams in several parts of the central Ghawr, are completely absent in the az-Zarqā' system. They could have been entirely demolished by the 8000BP incision and the subsequent flooding episode.

Tall Dayr 'Allā is both thematically and geographically the centre of the project. The survey has at first concentrated on the surroundings of Tall Dayr 'Allā. It was attempted to cover this region as completely as possible in order to get detailed information on this area. In addition to a circle of ca. 1km around Tall Dayr 'Allā the vicinities of other talls were surveyed as well. Where possible a direct connection with Tall Dayr 'Allā was made by surveying the area in between. In this way the fields around Tall Ḥamma, Tall al-Fukhār, Tall 'Adliyya, and part of the surroundings of Tall Abū Sarbūṭ, Tall Bashīr, Tall Mazār, Tall Ghazāla, and small parts around Tall 'Arqadat and Tall Ikhṣāṣ were surveyed. As a result, the area in between Tall Abū Sarbūṭ, Tall al-Fukhār and Tall Ḥimma with Tall Dayr 'Allā at its centre was investigated in a more or less continuous fashion. In these surveyed fields a few areas with significantly higher artefact densities than the overall density have been discovered. These large concentrations chiefly belong to three periods; *i.e.* the Late Chalcolithic, Early Bronze Age and the Mamluk era.

About 800m to the Northeast of Tall Dayr 'Allā and immediately north of Tall Qa'dān North a concentration of pottery was discovered. The sherds were distributed over a large area with the densest concentration of sherds extending over an area of ca. 200x150m. In some cases the sherds were of a significant size, yet their ware was quite brittle leading to the conclusion that they did not originate far away and had not been on the surface for long. In fact the field had been ploughed recently; for the first time since it was planted with citrus trees in the early 1960's.

Closer examination of the pottery led to the conclusion that the sherds must be dated to the Late Chalcolithic Period. Beside pottery fragments, also flint artefacts and several pieces of ground stones were found. More analysis needs to be done on the artefacts and their distribution pattern, but even before the research has been finished it is warranted to state that this distribution reflects a significant mother population, buried in the soil that most likely must be interpreted as a settlement.

A second concentration is located 800m to the West-southwest of the Chalcolithic site and

800m northwest of Tall Dayr 'Allā on the North bank of the Wādī al-Ghawr. Although its size is a little bit smaller, *i.e.* 220 x100m, the density of finds is just as high, with a maximum of approximately 100 sherds per plot, leading to an average of 2 sherds per m^2. By preliminary comparison of the pottery to the published material of Tall Umm Ḥammād several of the bowls correspond to genre 50. This genre occurs in stage 3 and the start of stage 4 of Tall Umm Ḥammād, which dates to the EB Ib and the start of the EB II Period (Helms 1992: 34/35+79/80). Few artefacts other than pottery were discovered. Again some flint scrapers and a sickle blade with gloss were found, but no grinding stones or other artefact types. Currently the pottery analysis is carried out and will hopefully provide us with more insights into what this distribution represents.

About 1700m north-northeast of this EB concentration and 250m southwest of Tall 'Adliyya another EB concentration was discovered. This concentration is significantly smaller, about 60-80m, and has a maximum of 60 sherds per plot, *i.e.* 0.8 sherds per m^2.

It is both archaeologically and historically well attested that the Jordan Valley was a major sugar producer in the Mamluk era. Sugar cane was grown in the valley and in water driven mills sugar was extracted. Several sugar mills have been discovered in the Jordan Valley (Ibrahim *et al.* 1988: 183, 203). The abundance of pottery from this period has been reported by other surveys, but sugar pot sherds have not been separated from other Ayyubid/Mamluk sherds. It is therefore impossible to distinguish between remains of sugar industry and other types of activity.

The survey has discovered large quantities of sugar pot sherds at two locations that previously had been reported to contain sherds from the Ayyabid/Mamluk Period, *i.e.* Tall Rikābī (Glueck 1951: 314; Ibrahim *et al.* 1988: 203) and Dirar (Ibrahim *et al.* 1988: 203). The majority consisted of both sugar bowls and syrup jars, with only a very limited number of other vessel types. The large number of sugar pot sherds indicates the presence of some form of sugar industry.

Within the modern village of Ḍirār the survey discovered the remnants of a water mill, still standing several meters high (see **Fig. 3**).

3. Mill of Ḍirār.

Villagers informed us that this mill was in use until the 1970's as a bread mill. It was supplied with water by the Shiqāq channel. This channel was the northern main irrigation channel of the sub-recent irrigation system that was in use until the installation of the East Ghawr Canal, in the late 1960's. The surface around this modern mill was, however, littered with sugar pot sherds. Again the villagers were able to help and recounted that there used to be a tall immediately west of the mill, aptly called Tall aṭ-Ṭāḥūna, but that it had been partly covered by a road and partly removed in the 1970's. Examination of the damaged parts resulted in the discovery of more sugar pots mixed with limited amounts of other Late Islamic vessel types. The Location of the modern village of Ḍirār can therefore also be identified as a Mamluk sugar mill.

A few hundred meters east of Tall Dayr 'Allā, just south of the Wādī al-Ghawr a previously undetected concentration of Ayyubid/Mamluk pottery with a predominance of sugar pot sherds was discovered. Again it was interpreted to reflect the presence of sugar industry. As many of the sugar mills were later reused for other types of grinding, it may be possible that this sugar mill is the same as the mill the village of Dayr 'Allā that was taxed in the Ottoman Daftari of 1525/6 until 1596/7 AD (Hütteroth 1977: 168). It is likely that water was tapped from the Wādī al-Ghawr, which today is only a small brook, but carried much more water before modern irrigation and water management activities started. The excavated Mamluk sugar mill of Tall Abū Sarbūṭ is located 2km downstream on the Wādī al-Ghawr (De Haas *et al.* 1989).

Concentrations of sugar pot sherds without

any structure can of course also reflect the presence of a kiln producing this type of sherds. The presence of sugar industry must have generated a high demand for sugar pots. The concentrations discussed cannot be interpreted as kilns, as they did not reveal any examples of misfiring. The survey did however discover the remains of a kiln used for firing sugar pots at another location.

On the North-northeast edge of Tall Zakārī a large recently dug hole with a diameter of ca. 2.5m was found. About a third of the edge of the hole was vitrified and a mudbrick lining was visible behind this vitrification. In the dump around this hole, sugar pot sherds were discovered. It has been interpreted as a kiln for firing pottery, dating to the Mamluk Period; judged by the amount of sugar pot sherds. More attention must be paid to this feature next season in order to draw more precise conclusions.

The presence of at least 4 Mamluk sugar mills between the Wādī Rājib and the Wādī az-Zarqā', combined with the Ayyubid/Mamluk remains discovered by previous surveys on tall sites, points to the conclusion that this area was heavily occupied and cultivated during this period. The cultivation of sugar cane requires a lot of water. Moreover running water is needed to drive the mills. Both these features point to the conclusion that irrigation and some sort of water management must have been practiced in this period to make the arid Jordan Valley suitable for this kind of activity.

The Southern Part of the Research Area

The confluence of the az-Zarqā' and the Jordan River is the most prominent feature of the southern part of the research area. Both rivers have penetrated the Ghawr with incised flood plains as the result, revealing enormous profiles with Late Pleistocene and Holocene deposits. These deposits bear a lot of geomorphologic information about the formation of the Ghawr and the Zawr and ease the reconstruction of the Palaeo-landscape of the Lower Jordan Valley. It is on the active floodplain of the Zawr that the site of Dāmiya is located. In order to understand the landscape before and during the occupation on Tall Dāmiya, two deep trenches were opened close to the northern and southern foot of the settlement mound. Both trenches were dug down to about 3.80m below the surface. The exposed sequences of both trenches show several superimposed layers of alluvial sand and sandy-clayey silt separated, at different intervals, by clear discontinuities. Detailed examination, both macroscopically and by thin-sections, of these depositions revealed two different developments, despite their relatively close distance.

At the base of the northern trench is a layer of light red to light brown fine sandy silt with small patches of grey-green clayey material. This deposit, visible down to 0.6m, also contains a number of small terrestrial shells and gravels and presents some dark patches as well as a fissural soil structure. All of these features indicate a regime of sedimentation characterised by periods of slow flooding in a seasonally water-saturated milieu, and by episodes of torrential flows, with lateral contribution from the marly banks of the Zawr. This environmental setting seems to be terminated by a major period of erosion. This was followed by the deposition of a 0.1m thick bed of gravels and a 0.8m thick layer of light brown to light grey fine silty sand, mixed with lumps of marl and lenses of gravels. These deposits include a lot of pottery sherds, fragments of construction material and lenses of charcoal indicating a local reworking of archaeological artefacts. A progressive diminution of the sand grain size, in an almost 2.3m thick light brown to yellowish sandy silt accumulation, shows a slowing down of the energy of flows. As opposed to the basal layer, signs of seasonal water saturation are absent in the last two sedimentary bodies. Instead, features such as lenses of gypsum crystals, fragments of surface crusts, pulverised microstructure and open inter-aggregates porosity point to a weak pedological development under drier conditions.

The southern trench shows a succession of at least eight layers, varying in thickness between 0.2 and 0.8m. Mineralogical compositions of these layers diverge between red-pinkish fine sandy materials and light brown to brown grey/green sandy silt, mixed with a well homogenised marly component. These deposits have an either prismatic or a grumular to columnar structure. In some rare cases, they are massive and very compact. Terrestrial shells and micritic nodules are often observed in different quantities. Except for the upper 0.6m, lenses of gypsum crys-

tals are almost absent. Similar to the northern trench, pottery sherds were observed down to three meters below the surface. These sedimentary and post-depositional features argue for environmental circumstances similar to the one inferred from the basal deposits of the northern trench: alternating periods of slow streaming and episodes of torrential flows with soil development in a seasonally saturated medium.

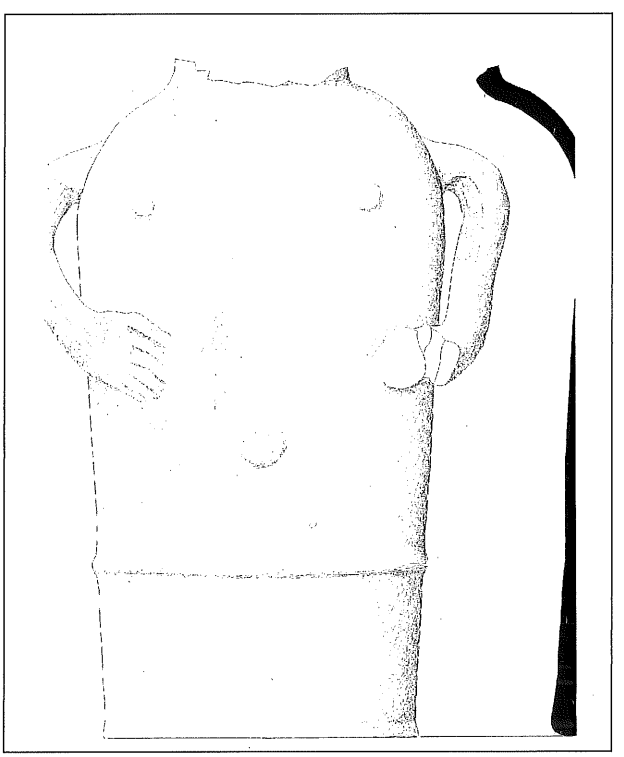
The first result to be deduced from these two sequences concerns the initial landscape configuration, upon which the settlement was established. The representative quantities of pottery sherds retrieved in lower levels were exclusively of Iron Age date. This suggests that the ancient landscape was about three meters lower than the present walking surface. The inhabitant of the site then took advantage of a hydrographical network slightly less incised than today, of a soil moister that lasted for a longer part of the year and of frequently renewed soils caused by frequent surface flooding. The contrasting palaeoenvironments of the southern sequence and the major part of the northern one can be connected to the erosional episode recorded on the top of the basal layer of the latter. This erosion may be connected to the opening of a deep, wide channel on the northern edge of the site occasioned by a sudden change in the direction or velocity of the az-Zarqā' main stream or of one of its member. In all cases, the time of this incision appears to be later than the formation of the southern sequence and most probably later than the abandonment of the site. This chronological question should, however, be clarified by further investigations.

The archaeological survey has covered a considerable number of fields in the Zawr. However, the number of artefacts discovered in this area was extremely low. In most fields an average of less than 0.5 sherds per plot was found. Higher densities were only discovered in the direct surroundings of Tall Dāmiya, near the modern but now deserted village of Dāmiya and on the supposed trajectory of the road leading to the old bridge over the Jordan. This bridge was most likely built in 664AH /1265AD by Sultan Bibars and connected Nablus to as-Salṭ (Kareem 2000: 11). Considering the occupation history of Tall Dāmiya (see below) and the presence of a ford crossing the Jordan River, this east-west route was probably much older[6]. The human activity attested for at least some periods, as evidenced by the tall and the bridge, forms a discrepancy with the low number of artefacts discovered. However, this area is part of the Zawr and was until recently, submerged annually as both Jordan and az-Zarqā' burst their banks in the wet season. In this way artefacts on the surface were either washed away or covered by sediments.

The medium sized settlement mound of Tall Dāmiya rises abruptly out of the flat fertile lands of the Zawr and is located not far from the remains of the medieval bridge. In 2004 three soundings were conducted directly on the edge of a recent bulldozer's cutting on the southern side of the mound's top. The excavation gave us tantalizing clues about settling cycles at the site during the late Iron Age (Kaptijn *et al.* 2005). However, more stratigraphic excavation work was needed to contribute to the general research aims of the *Settling the Steppe* project. With the intention to uncover more and older Iron Age strata, the excavation was expanded to the eastern slope in 2005, though with a direct stratigraphic relationship to the previously excavated trenches. The earliest deposits excavated at Tall Dāmiya consisted of a series of occupation and debris layers accumulated against a 1.5m wide surrounding wall. This mudbrick wall, with a construction date somewhere in the 9th century BC, did most likely protect the domestic households on the summit and shows only small alterations and restorations up to its destruction at the end of the 9th century BC. Around 800 BC several settlements in the Jordan Valley, including Tall Dayr 'Allā, Pella, Tall Abū al-Kharaz and Tall Dāmiya exhibit evidence for a devastating earthquake, that not only destroyed most sites but the after-effects of which are archaeologically visible well into the following century. Many settlement sites in the Jordan Valley, including Tall Dāmiya, show rather poor squatter occupation in the beginning of the 8th century BC, following that particular earthquake. In the middle of the 8th century, the Dayr 'Allā regions

6. The ford is mentioned in the Old Testament (Joshua 3:16) and seems to be pictured on the Madaba Mosaic Map from 565SAD.

seems to recover from these difficulties. Tall Dāmiya was rebuilt and reveals material culture that can be linked to the Neo-Assyrian Empire. The gradual process of the Assyrian conquest of the Levantine society is also visible at other sites in the Middle Jordan Valley, like Tall Dayr 'Allā, Tall 'Adliyya and Tall as-Sa'īdiyya. Not only the increase of Assyrian Palace Ware, but also the discovery of a clay bulla, inscribed with cuneiform writing, shows the presence of Akkadian-reading people at Tall Dāmiya. Other finds include a large part of an anthropomorphic ceramic statue (**Fig. 4**). A huge conflagration ended the Assyrian Period and it seems that this fire completely chased away any 'foreign' presence. The pottery assemblage of the following village occupation reveals only local household types and wares, without any traces of inter-regional contacts. The late 7th and most of the 6th century BC is archaeologically hardly evidenced. The Middle Jordan Valley reveals only a few sites, like Tall Dayr 'Allā, with architectural features and sedentary occupation. The other sites contained thick deposits of courtyard layers and food-storing pits; possible traces of a more mobile and pastoral lifestyle.



4. Anthropomorphic ceramic statue, found in the Neo-Assyrian Period at Tall Dāmiya.

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