

## TELL BEYDAR SURVEY

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In summer 1998, at the invitation of Marc Lebeau of the European/Syrian Archaeological Project at Tell Beydar, and Karel van Lerberghe of the Catholic University, Leuven, a small archaeological survey was initiated in the Wadi 'Awaidj within the Khabur basin of northern Syria (fig. 1). Our aim was simply to attempt a moderately intensive survey in order to obtain a record of the history of human settlement through the last 8,000 years or so. This record, we hoped, would help us understand the processes that led up to the rise of urbanization in the region, as well as help chart what happened after settlement declined in the late third and second millennium BC. Another objective of the fieldwork was to describe and interpret the full record of landscape features, such as roads and canals, and to place them within an environmental context.

The results described come from three weeks of survey in September 1997. Our base was at the Tell Beydar excavation house, and survey took place up to a distance of 12 km from that site. The field team comprised the writer, Eleanor Barbanes, and Patricia Van Dorpe; mapping from SPOT satellite images was con-

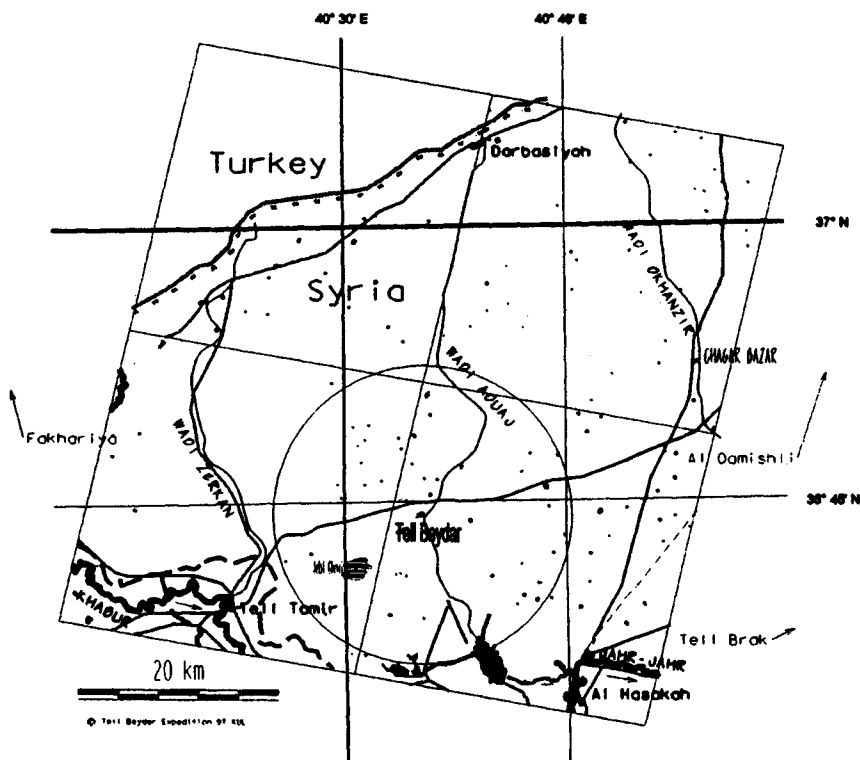
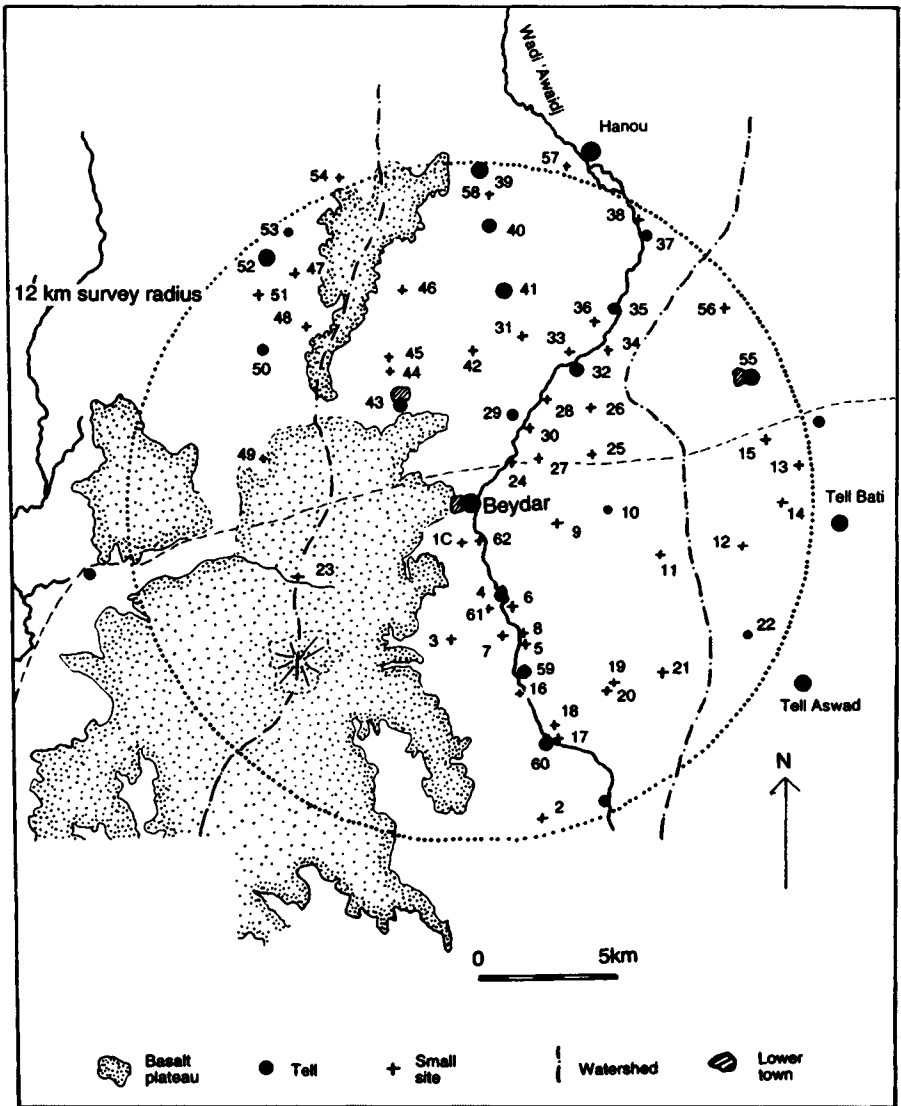


Figure 1. Northwest Khabur basin showing mapping framework. Drawing by Kris Verhoeven

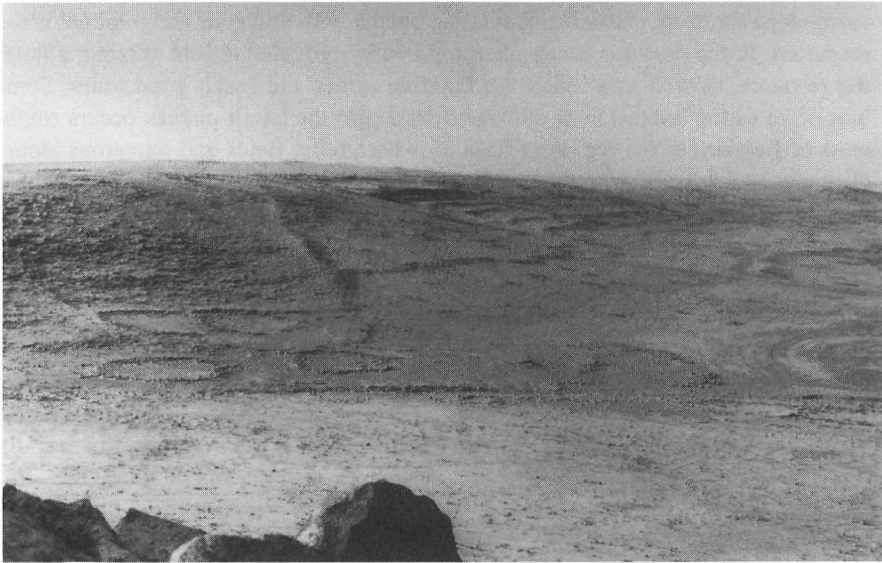
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**Figure 2.** Twelve kilometer radius survey area with surveyed sites (TBS numbers), other sites, and main topographic features

ducted by Kris Verhoeven of the University of Ghent and from CORONA images by the author. I especially wish to thank Prof. Dr. Sultan Muhesen, Director General of Antiquities, Damascus, for permission to survey. Thanks go also to Marc Lebeau, Karel van Lerberghe, Antoine Suleiman, and various Syrian colleagues, all of whom provided considerable assistance in the field, to Elena Rova, Tom Broekmans, and Olivier Nieuwenhuyse who supplied advice on ceramics, and to Bertille Lyonnet who provided valuable data from her own surveys of the area.

This survey follows up the archaeological survey of 1990 when Bertille Lyonnet undertook a large scale reconnaissance survey of the Upper Khabur basin. The



**Figure 3. View of east-facing basalt scarp showing ancient fields**

present survey is therefore the first detailed survey of the Beydar area and was specifically undertaken to provide a context for the site and its neighborhood. The 1997 survey employed SPOT satellite images to provide a basic map of the area at 1:50,000 (figs. 1 and 2). This work, undertaken in Ghent by Kris Verhoeven, produced a detailed record of major topographic features, wadis (all dry at the time of survey), wadi flood plains, rural dirt tracks, modern roads, and villages. In addition, we attempted to recognize tells on the various images, but because they were very similar to villages on the images, sites and villages were often confused. Although archaeological feature recognition was not perfect, the SPOT-generated maps provided an excellent basis for field reconnaissance and provided our basic mapping framework. In addition, two sets of declassified CORONA satellite photographs taken during May 1965 and August 1969 provided a rather detailed record of topographic features, tells, and landscape features for the region.

Ground control was then undertaken in order to recognize, describe, and date all visible sites, to obtain basic information on the physical landscape, and to describe off-site features such as radial lines previously noted by van Liere and Lauffray. This part of the survey proceeded by systematic coverage of the area by minibus; sites recognized were allocated a number (TBS 1, etc.; i.e., Tell Beydar Survey), together with topographically distinct site subdivisions (A, B, C). Potential sites recognized on the satellite images, together with any sites recognizable on the ground from the rural road system, were visited, paced, leveled, and geographically fixed using a hand-held Global Positioning System (GPS).

### **Physical Geography of the Beydar Area**

Topographically the area is a little more lively than much of the Syrian Jazira with broad north-south valleys and their axial alluvial plains cutting through broader undulating uplands. West of the Wadi 'Awaidj a low basalt plateau fringed by a steep

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scarp slope forms an extensive undulating upland with thin soils and minimal water resources. In the past this basalt plateau probably provided upland grazing, a hunting resource, as well as a source for building stones and basalt grindstones. Some hint of an earlier extension of cultivated land onto the basalt plateau occurs southwest of Beydar (in the region of TBS 3) where relict fields and numerous stone-clearance mounds occur on the basalt scarp (fig. 3). Today the Beydar area, with a mean annual rainfall slightly less than 300 mm, is mainly under rain-fed cereals, or, where ground water resources permit, irrigated cotton.

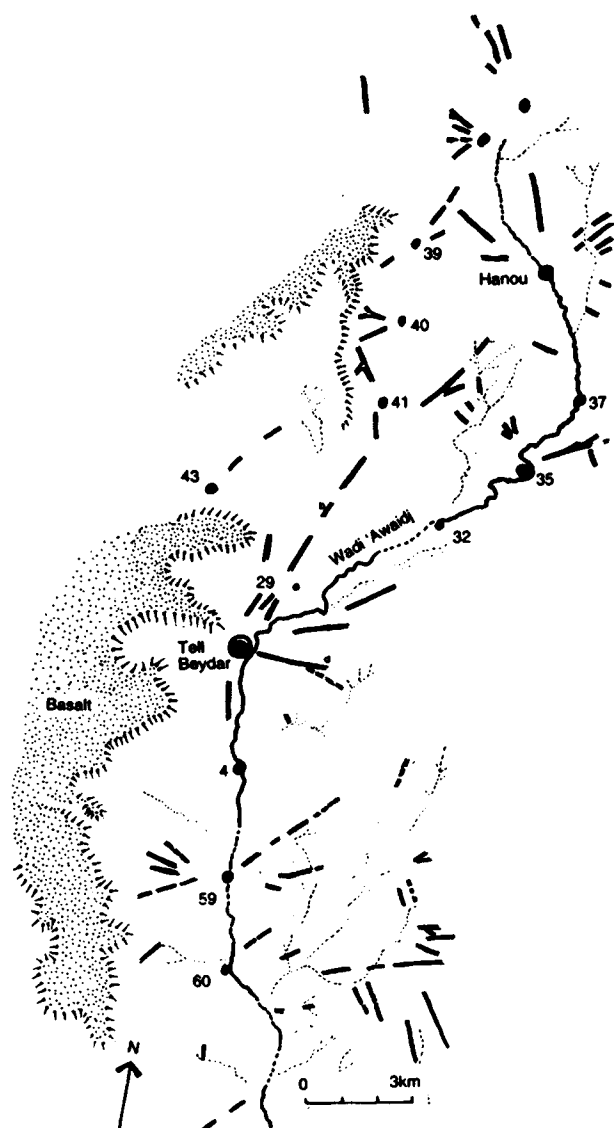


Figure 4. Linear hollows to north and south of Tell Beydar

### Archaeological Landscape

Off-site features were recorded both during and prior to fieldwork by means of CORONA images. Linear hollows, as originally recognized, form broad dark alignments across the landscape. On the CORONA photographs the alignments radiate from major tell sites as gray lines (fig. 4); in certain cases they can be quite conspicuous, frequently being more obvious than the smaller sites. On the ground, when visible, linear hollows mainly appear as broad very shallow and faint depressions. In many cases what had once been fairly distinctive features now appear to have been removed by persistent plowing. Nevertheless, on the ground moderately clear examples were recorded to the north of Tell Beydar, and to the northwest, west, and southeast of Tell Jamilo (TBS 59). Because these linear hollows connect tells, all of



**Figure 5. Tell Beydar**

which have major Early Bronze Age (and presumably earlier) occupations, it seems likely that the routes themselves are of Bronze Age date or even slightly earlier. In addition, basalt quarries and relict fields were noted on the basalt plateau, and off-site scatters of sherds (field scatters) were often noted on the fields between sites.

## Results of Regional Survey

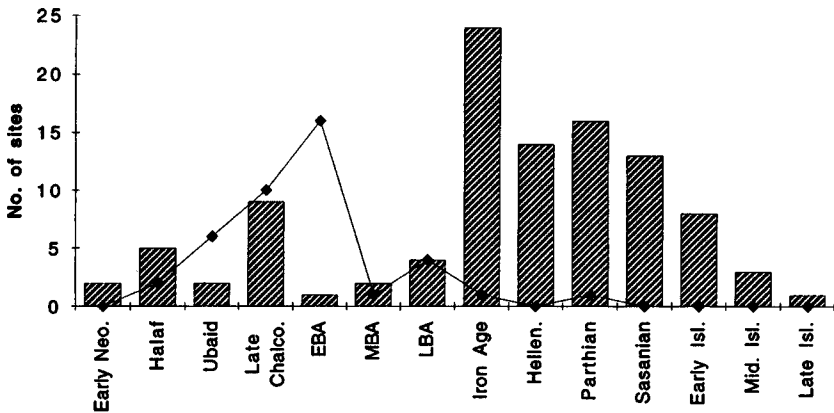
Although most people regard the typical Near Eastern site as being the tell, sites in the Beydar area are more varied. Most common are small low mounds that cover usually from 1.0 to 1.5 ha, and are usually either pre- or post-Bronze Age in date. That is, they are usually either prehistoric or are Iron Age or later. In addition, occasional lower towns — extensive sprawling areas of low mounding — appear to represent the remains of Iron Age lower towns. Finally classic tells are present, and these were mainly occupied between about 4000 BC and 2500 BC or somewhat later. Of these, the kranzhügel of Tell Beydar, being a large mound within an annular enclosure wall, falls outside the three classes noted above. Tell Beydar, excavated by the Euro-Syrian mission (figs. 4–5), has yielded extensive private and public buildings as well as a large cache of tablets written in a form of pre-Sargonic Akkadian.

## Settlement Patterns Through Time

Altogether some sixty-two sites were recorded in the 1997 field season. This allows some broad generalizations to be made about the distribution of sites through the last eight or nine thousand years.

During the ceramic Neolithic, Halaf, and Ubaid periods the population appears to have mainly occupied small dispersed sites (fig. 6). Compared to the Early Bronze Age, settlement was therefore rather dispersed, a phenomenon reported from other parts of the Jazira as well. By the Ubaid period there was both a decrease in smaller sites and a slight shift towards the occupation of mounded sites. The de-

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**Figure 6. Number of small sites (columns) and tells (solid lozenges) through time**

crease in small sites may be simply because of the small sample size, but the concentration on tells appears to be more valid. The phenomenon of settlement associated with tells becomes clearer with the earlier part of the late Chalcolithic, and in general for this period (i.e., the late Ubaid and Late Chalcolithic) it is evident that tells formed an important focus of occupation. Nevertheless a significant part of the population continued to live in small, dispersed sites during this time period. The steep slopes of the tells suggests that tells were already surrounded by fortification walls at this time, but this cannot be proved by survey alone. In general survey evidence suggests that nucleated settlement on tell sites therefore probably started in the Ubaid or late Chalcolithic periods.

In the Wadi 'Awaidj northeast of Tell Beydar, two small sites (TBS 34 and 38) yielded small collections of beveled rim bowls, together with a few other Late Uruk sherds. Both sites are unrounded and lie between or away from the small Chalcolithic mounds. One site, TBS 34, lies roughly halfway between two Chalcolithic mounds (TBS 32 and 35), in a location that was probably close to the territorial boundary between the two sites. Such locations, some distance away from tell sites or obvious local late Chalcolithic centers, have also been observed by the writer in the North Jazira (Iraq), the Karababa Dam area (Turkey), and the Balikh Valley (Syria). Because the Beydar area sites with beveled rim bowls lack the full assemblage of southern Uruk diagnostics, it would be premature to include them with the Uruk "stations" as classified by Algaze. Nevertheless, they appear to be part of the same phenomenon in which small ceramically specialized settlements were established along routes and outside the limits of pre-existing late Chalcolithic settlements.

Bronze Age occupation occurs in the form of a distinctive pattern of tells ranging in size from the 1.75 ha and 15 m high Tell Kaferu (TBS 10), up to Tell Beydar (TBS 1) which at 26 ha and 27 m high is the most massive site in the area. With the exception of the few Early Bronze Age sherds on the small Halaf site of TBS 61, it seems that no small sites were occupied during the third millennium BC. Bronze Age tells formed a distinct alignment along the Wadi 'Awaidj (fig. 7: TBS 60, 59, 4, 1) up to Tell Beydar. North of this point, smaller Bronze Age tells (but with a sig-

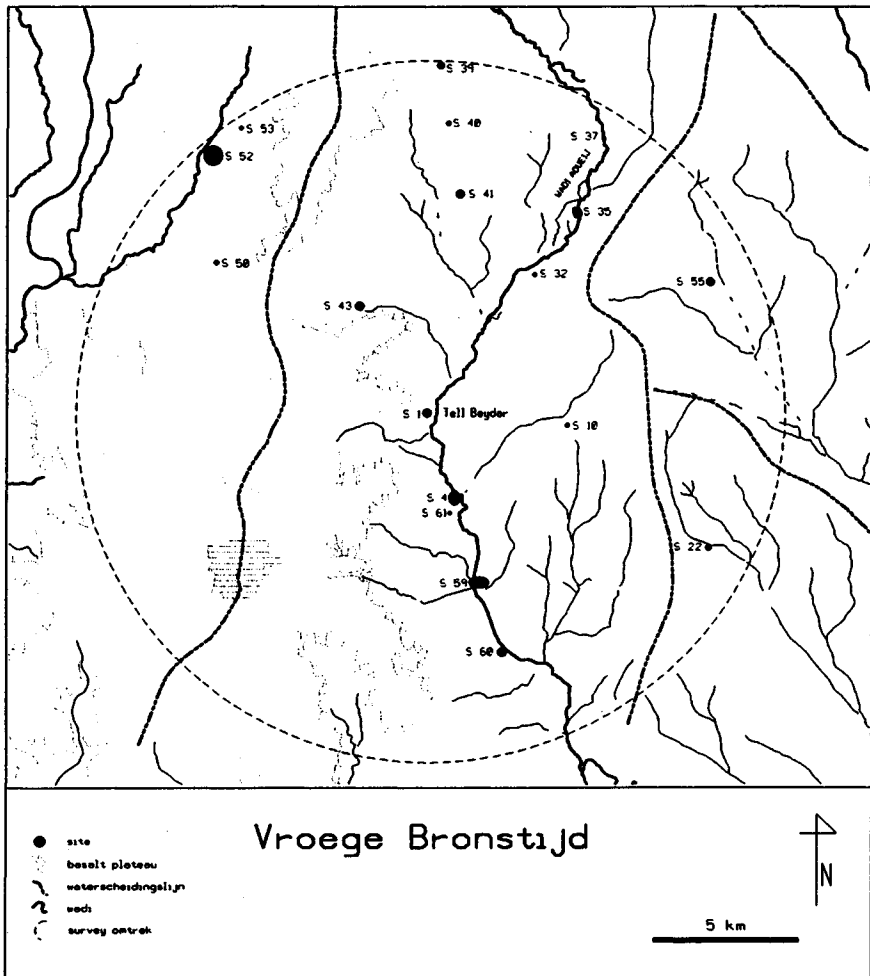
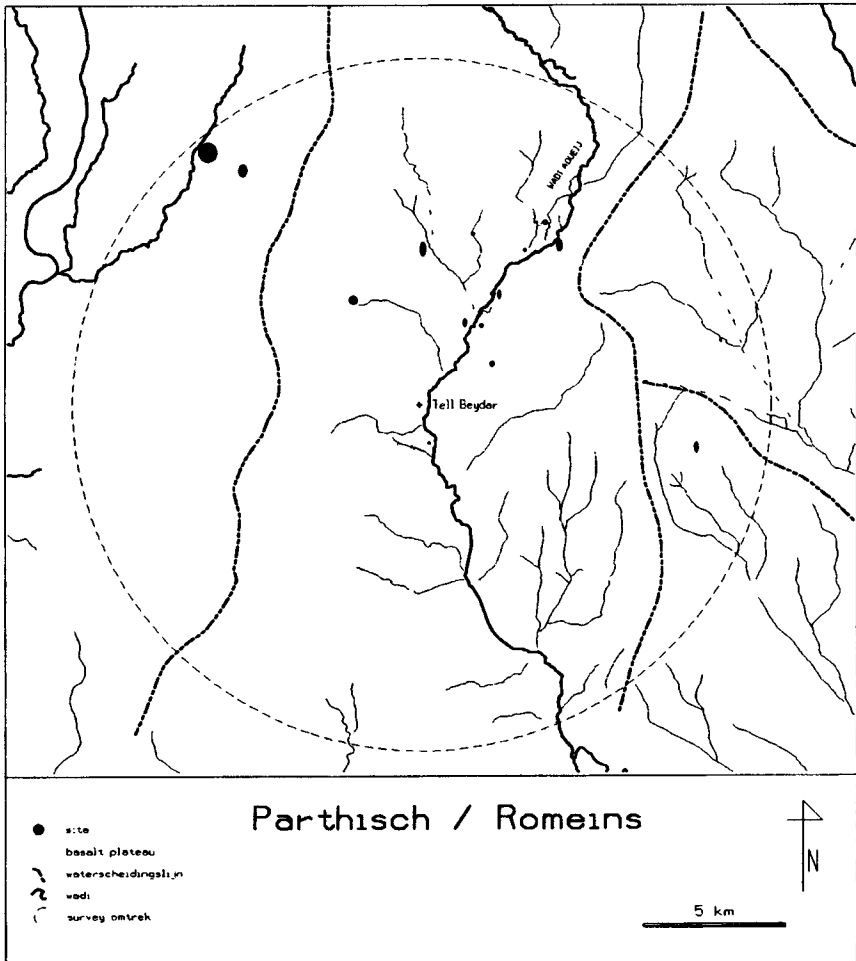


Figure 7. Distribution of Early Bronze Age sites

nificant visible presence of late Chalcolithic) followed up the Wadi 'Awaidj along its distinctive eastern bend: TBS 32, 35, 37, and onward to Tell Hanou. Interestingly, the alignment of large tells followed north from Tell Beydar, along the western side of the valley through TBS 41, 40, and 39. These sites are not on any major wadi, and instead the inhabitants probably obtained their water from springs issuing from the foot of the basalt escarpment. Their size, which is significantly larger than TBS 32, 35, and 37, suggests that the greatest population and perhaps traffic during the third millennium BC occurred along the western side of the valley (see below). In the Wadi 'Awaidj, the main site was clearly Tell Beydar, while the valley to the east was dominated by the medium-size mounds of Tells Aswad Fouqani, Bati, and Effendi (TBS 55). To the west, in a broad, fertile valley leading to the Wadi Zerkan, the dominant site is Tell Farfara (TBS 52), a large rectangular apparently walled site of some 9 ha.

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**Figure 8. Distribution of Parthian/Roman sites**

At this stage of the survey no attempt has been made to subdivide the Early Bronze Age sites into ceramic sub-periods. Nevertheless, by the close of the third millennium BC few tells were heavily occupied, and by the early second millennium, when Khabur wares provide a conspicuous ceramic indicator, virtually no sites appear to have been significantly occupied. However, the evidence for the early second millennium is not simply negative because two sites show evidence of significant quantities of Khabur wares. Both sites — Tell Sekar Fouqani (TBS 39) and Tell Hanou — therefore appear to have been major sites of this period, and it is tempting to see them as strongholds overlooking from the north an otherwise deserted or thinly populated area to the south.

There followed around 1000 BC or slightly later, a massive upsurge in settlement (fig. 6). This is evident in the form of a rash of mainly small, dispersed settlements and more extensive lower towns. There was also much less settlement on the summits of tells after the third millennium BC. There were more settlements than at any



other period during the Iron Age, and it appears that this was also the period of greatest population in the area. This conclusion, which is a result of the recognition of smaller sites, is counter to many earlier reports, which suggested that the Jazira was often sparsely populated in the Iron Age. Not only were there more sites of the first millennium BC, but also settlements were present in most environments, that is along the main wadis, on the rolling steppe beyond, and apparently for the first time, on the basalt plateau.

In addition to the widely dispersed small settlements, three lower towns formed sprawling areas of low mounds (1.0–3.5 m high) situated below large Early Bronze Age tells. The largest, Tell Beydar 2 (TBS 1B), covers an estimated 30–40 ha; the next, TBS 43A–B, covers about 19 ha, whereas TBS 55 H–K was only some 6–7 ha in area. None show any signs of either gates or fortification walls.

During the Hellenistic, Parthian, Sasanian, and Islamic periods there appears to have been a steady decrease in the number of sites through time (fig. 6). Given that there was no commensurate increase in the size of settlements, it can be inferred that this decline represents a real decrease in the sedentary population of the area. Consequently, by the second millennium AD, the region was quite thinly populated. Especially during the Hellenistic and Parthian periods (ca. third century BC to third century AD) settlement appears to have been mainly concentrated to the north of Tell Beydar (fig. 8). If this distribution is real, and not simply a result of the small area surveyed, it may be taken as indicating that the limit of viable rain-fed cultivation only spread as far south as Tell Beydar at this time.

## Discussion

The long-term pattern of settlement is clear in general but obscure in detail. During the prehistoric periods, namely the ceramic Neolithic to Late Chalcolithic, settlement was dispersed into a mixed pattern of small sites, and presumably small but growing centers. By the Early Bronze Age, when settlement was nucleated and concentrated upon tells, the region was dominated by Tell Beydar. In contrast with the wetter part of the Jazira in Iraq, where Bronze Age sites formed a network across the terrain, the Beydar pattern is remarkably linear, with tells being evenly spaced about every 3 km. This distribution, which follows the valleys and/or the main routes, is rather dense and preliminary calculations suggest that although most sites would have had sufficient cultivable land within 1.5 km (i.e., halfway to their nearest neighbor), Tells Hassek (TBS 43), Hanou, Farfara (TBS 52), and Beydar (TBS 1A) might have required significantly more land to be self-sufficient. Because all of these sites are located in the wetter northern part of the area it is likely that additional food would have been produced on the undulating steppe beyond the sites, or it was imported from neighbors.

Middle Bronze Age occupation was especially limited; a similar pattern of sparse occupation was noted by Lyonnet (1996) who shows that “trace” Khabur ware occupations occurred along the Khabur River, and that the area of Beydar was essentially deserted. The finer sampling strategy of the Beydar survey shows this in more detail. Hence although the entire area was occupied in the early to mid-third millennium BC by the Khabur period only Sekar Fouqani and Hanou in the north of the area were significantly occupied. However, from Lyonnet’s work, it is evident

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that to the north of these two sites Khabur ware was also common. The deserted area to the south of Tell Sekar Fouqani (TBS 39) and Tell Hanou may therefore form part of the domain of the Hanaeans, well known from the Mari records.

Because the Iron Age pottery has not yet been subdivided into phases, the rash of settlement in this period cannot be related to any political entity. Settlement probably dates to both the period when the region was within the Neo-Assyrian Empire, and that which preceded it. Thus, although it is tempting to see such a rash of dispersed settlement as being a result of a deliberate Neo-Assyrian settlement policy, spontaneous settlement of nomadic pastoralists and/or Arameans seems equally likely. However, whether spontaneous or deliberate, it is clear that both environmental and political conditions were propitious for settlement at this time.

The significant decline in settlement that commenced during the Hellenistic and Parthian periods apparently continued through the Sasanian and Islamic periods, so that by the mid to late Islamic period the area appears to have been thinly occupied.

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