The 1998 field season at Tell Beydar was short, only some two weeks, and took place during the second half of August. In order to avoid overcrowding of the dighouse it was necessary for us to undertake our fieldwork before the main European/Syrian team arrived at the end of August. Unfortunately this meant that fieldwork had to be conducted in virtually the hottest part of what had been a very hot year; nevertheless we sweated it out and our fortitude was rewarded by results that significantly extended those from the previous year. It was our objective to complete the basic survey of the 12 km radius survey area around Tell Beydar. As in
1997 our team was drawn from the University of Ghent (Patrice van Dorpe), the University of California at Berkeley (Eleanor Barbanes), and the University of Chicago (Tony Wilkinson and Jason Ur). In addition, students from the University of Damascus provided help both in the field and with the pottery analysis. As before we are grateful to the directors of Tell Beydar excavations, Marc Lebeau and Antoine Suleiman, and the director of the University of Leuven mission Karel van Lerberghe, for providing help in the field. Funding was provided by the Belgian Mission, the Oriental Institute, and the British School of Archaeology in Iraq. Moreover, the work would not have been possible without the considerable support of Professor Dr. Sultan Muhesen, director general of Antiquities in Damascus.

By the end of the second season we had recorded a total of eighty-two sites from an area that covered some 450 sq km (174 sq miles); this amounts to one site every 5.5 sq km (one site every 2 sq miles). However, this figure of eighty two sites rather obscures the fact that much of our time was spent collecting and sketch mapping the lower towns of sites that had already been discovered in previous seasons (and which therefore could not be logged as newly discovered sites). Fieldwork by the regional team demonstrated that most of the small sites in the area were either pre-Bronze Age or post-Bronze Age in date. That is they were not Bronze Age, and more specifically most tells had major occupations in the Early Bronze Age. This supports our conclusions from the previous year that for the third millennium BC, the dominant form of settlement was the large fortified tell. The surface collection scheme undertaken by Ur, van Dorpe, and their Syrian co-workers further refined our information base on these large, high mounds (fig. 1).

By the second millennium BC, however, when large parts of the area had been abandoned, it became obvious that settlements had started to grow up as lower towns around the bases of tells. This shift was not simply a matter of the inhabitants
of the tells moving their houses and possessions downslope. Instead the evidence suggests, as has been noted for parts of the eastern Khabur, that there was a significant period during which many of the mounds were deserted. Subsequently, after a gap of several centuries, lower towns then grew up at the foot of many tells in the mid to late second millennium BC. There appears therefore to have been a period in which the local tell-dwellers either moved out of the area or became nomadic. They, or other communities, then returned during the Mitannian or Middle Assyrian period to re-establish small villages at the feet of pre-existing mounds.

This development of lower towns therefore proved to be the precursor of the development of the distinctive pattern of dispersed Iron Age rural settlements that occurred in the first millennium BC (fig. 2). This pattern, the analysis of which formed part of the Berkeley Ph.D. dissertation of Eleanor Barbanes, is characteristic of a more widespread pattern that occurs throughout much of northern Syria and Iraq during the earlier first millennium BC. As noted in the 1997/98 Annual Report, when the area came under the administration of the Neo-Assyrian Empire, it became possible for small outlying communities to grow up in the countryside (fig. 3). This was presumably in part because of the protection afforded by the empire. Although the development of such villages and farmsteads must partly result from the settlement policies of that administration (which included the forcible transfer of people from other parts of the empire), it is also likely that a significant number of settlements might have been spontaneously settled by Aramaean nomads.

An additional archaeological problem concerned the morphology of the main Tell Beydar. Today the main central mound is conspicuously surrounded by an outer circular wall broken by gaps of what appear to have been gates. Between the main tell and the outer wall lies a broad flat area the surface of which was at approximately the level of the local stream, the Wadi Awaidj. This broad circular depression had attracted much speculation from the team members and visitors: was it a flat lower town area, the buildings of which had been covered by soil washed from the site or flooded by the wadi, could it have functioned as a cattle or sheep corral, or was it simply a defensive moat? The last few days of the season were therefore
devoted to testing these hypotheses by using a backhoe to excavate sample trenches partway across the depression (fig. 4). Although lacking subtlety, this equipment proved effective, especially because the area trenched was virtually devoid of cultural remains. Overall we managed to dig three major trenches across the depression around the main tell. The first, to the south, clipped through the wash deposits at the base of the tell and reached the buried soil upon which the site was built. This soil had evidently been cut away on the north side of the tell in antiquity, and then itself became covered by meters of sediment washed from the tell. This southern trench, up to 6.5 m in depth, had pottery to 5.5 m. The second trench was through the center of the depression and extended to a depth of 4 m below the level of the ground surface. Pottery was recorded in the fill to a depth of around 3.7 m. The third trench through the northern part of the depression also cut through in-washed deposits, but these had washed down from the outer wall of the site. This trench penetrated to
Figure 4. Backhoe in action digging north trench. Tell Beydar step trench is in background.

about 4.2 m depth and cut through an Early Dynastic burial towards its northern end. We are glad to report that the pottery was intact (fig. 5). In general, pot sherds in this trench were contained in the fill to depth of about 3.4 m. As with the south trench, we were able to recognize a point at which the old ground surface had apparently been cut away. Therefore, in all three trenches the pottery was found in the fills to virtually the base of the trench, and it was possible to recognize the old land

Figure 5. Late Early Dynastic burial group cut into buried ground surface alongside north trench
Figure 6. Linear hollows in area of Tell Beydar (by Jason Ur from CORONA images). 12 km radius survey area is encircled

surface that had been cut to both the north and the south. The pottery contained in the fills was always in the form of small fragments and resembled, as far as we could tell, the pottery of the Early Dynastic/Akkadian occupation of the main site itself. We therefore can suggest that during the early Bronze Age the main tell of Beydar was surrounded by a large excavated depression or moat that was at least 4 m deep, and which had been cut into the natural ground surface of the floodplain of the Wadi Awaidj. Although little could be said about the precise mode of deposition of the silt/clay deposit that filled the ditch, the level of the ground surface of the depression is approximately at the level of the floodplain, and it seems logical that it would have flooded periodically, although no classic alluvial or waterlogged deposits were evident in the sediments record.

Progress was also made with the mapping of linear hollows in the area of Beydar. Although a preliminary map was produced in 1997 (see 1997/98 Annual Report, p. 22, fig. 4), this was made simply by taking a photographic slide of the original photographic strip, projecting it against the office wall and then drawing off on tracing film the faint traces of the shallow linear hollow features that radiated away from the sites. In 1998, by contrast, the main photographic strips were scanned at a high resolution so that they could then be viewed and mapped using Adobe Photoshop software. The preliminary result of this mapping, by graduate student Ja-
Figure 7. Ancient but undated rock art pecked into basalt rock on plateau edge southwest of Tell Beydar

son Ur, is shown in figure 6, which shows a web of linear hollows that both radiate from the main tells in the area (e.g., the group around Tell Bati to the east of Beydar) and also run from tell to tell across the land surface. A good example of the latter is that running from Beydar to Tell Effendi and then on to the large site of Chagar Bazar. The last named site was originally dug by Max Mallowan from 1935 to 1937 and currently is being re-excavated by a joint English-Belgian-Syrian mission directed in part by Augusta McMahon (Ph.D., University of Chicago). These hollows appear to be the result of the sustained movement of people and their flocks across the ground surface to reach their fields, outlying pastures, or nearby settlements. As a result of such movement over thousands of years the ground surface appears to have become worn down and hollowed, both by the action of the feet, and by concentrated water flow that inevitably drains along them. Many of the hollows radiate from Bronze Age sites, and therefore appear to be of this date, but others, as suggested in the pioneering study by van Liere and Lauffray, may be somewhat later. In general these features appear to provide a palimpsest of many of the original route systems that crossed the area.

A major problem for archaeological survey in the Near East has been the recognition of pastoral nomadic sites. Because nomads rarely stay in the same place for long periods, have few material possessions, and live in flimsy structures, their traces are ephemeral. Nevertheless, as a result of the 1998 season, potential settlements of pastoral nomads have now been recognized in many places, particularly around the edges of the basalt plateau that lay to the west of Tell Beydar. Such sites tend to be low, unmounded sites, often with only a few stone circles or roughly rectangular structures. Artifacts, although present, are scarce and often belong to a wide range of periods. Such sites seemingly first appeared in the Iron Age, but there is more evidence for them in the Parthian, Sasanian, and Islamic periods. Although
many of the apparent pastoral sites are on or around the plateau, not all sites on the plateau are the remains of pastoral nomadic camps. It is therefore now possible to summarize activities on the plateau as: pastoral sites, outcrops with rock art (fig. 7), quarry areas for basalt stone, temporary living areas associated with specialized activities such as quarrying, and rare sedentary settlements. Interestingly, we have yet to record any evidence of Bronze Age or pre-Bronze Age activity on the basalt plateau.