

EXCAVATIONS AT AL-BASĀTĪN, A LATE NEOLITHIC AND EARLY BRONZE I SITE IN WĀDĪ ZIQLĀP, NORTHERN JORDAN

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Introduction

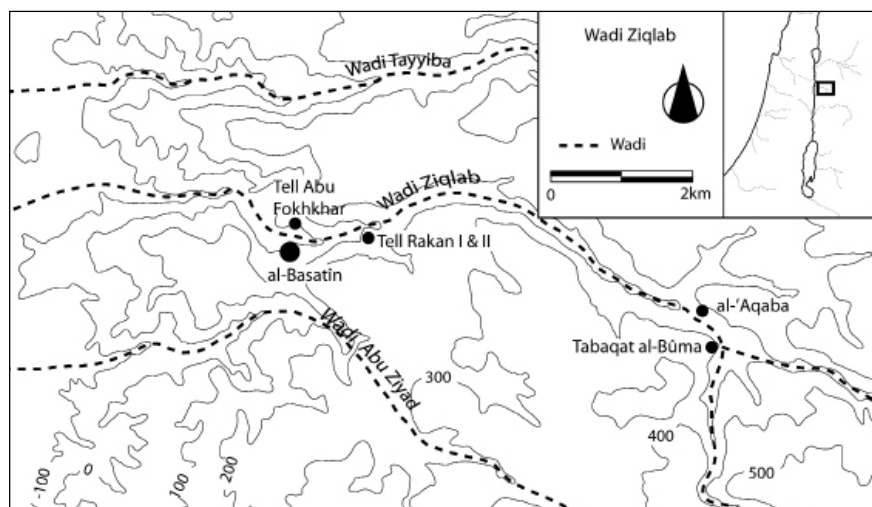
During the summer of 2009, the Wādī Ziqlāp Project renewed excavations at al-Basātīn in Wādī Ziqlāp, al-Kūra, northern Jordan. The site was initially discovered during archaeological survey by the Wādī Ziqlāp Project of the University of Toronto in the summer of 2000 (Maher and Banning 2001). Discovery of a small number of Late Neolithic artefacts on a river terrace (WZ 140) near Tall Abū al-Fukhkhar led to test excavations in 2002 (Fig. 1). These confirmed the presence of a Late Neolithic site and further excavations in 2004, 2006, and 2009 have demonstrated that the bulk of Late Neolithic occupation in the vicinity was in fact on a higher terrace (WZ 135), where there was also occupation in Early Bronze I, and use of the site, at least for agricultural and probably arboricultural purposes, in the Classical periods (Fig. 2; Banning *et al.* 2005; Gibbs *et al.* 2006, n.d.; Kadowaki *et al.* 2008).

The site is situated on a sloping terrace around 30m ASL, and about 1km downstream from the

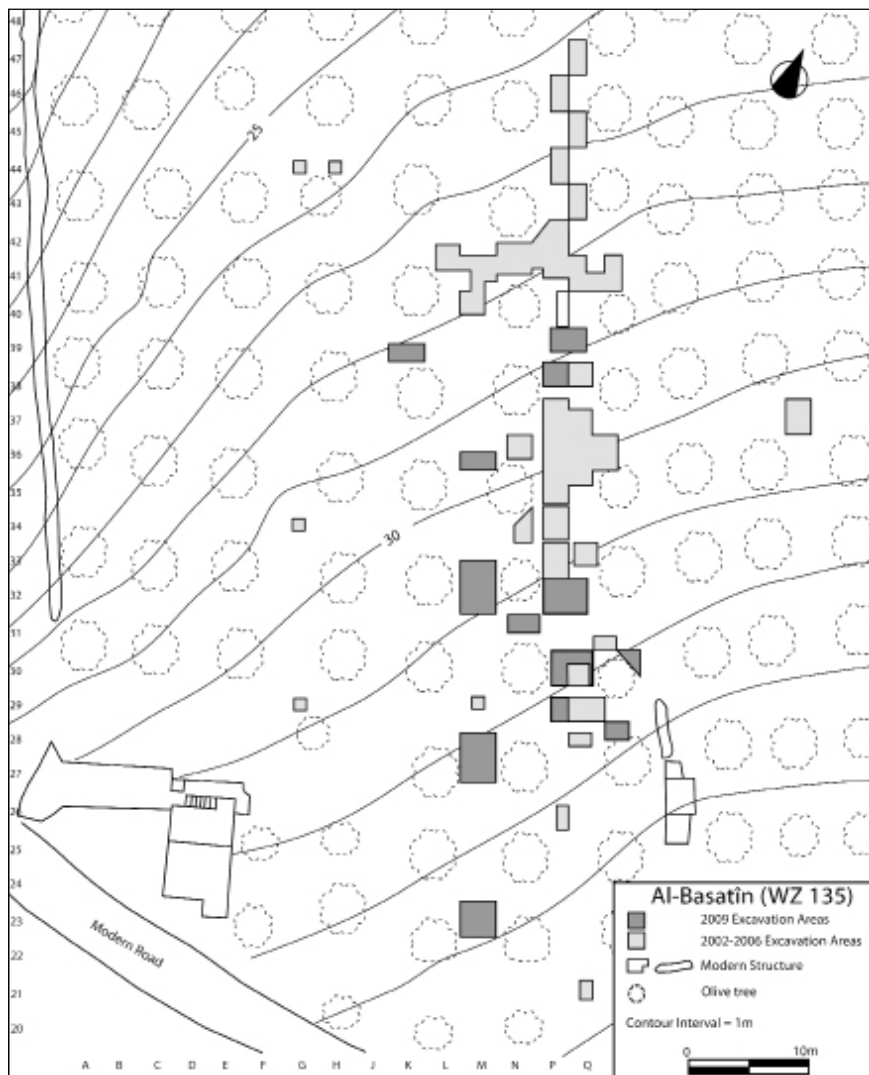
site of Tall Rākān I (WZ120), a village site with evidence of occupation in the Late PPNB, Yarmoukian, Chalcolithic, and Early Bronze Age (Banning and Najjar 1999, 2000; Banning *et al.* 2008). Most of the terrace is currently used for olive production.

Excavations at al-Basātīn

Excavations at the site are distributed over a nominal 3 x 3m grid in an attempt to determine the extent of the site and the nature of architecture in both Late Neolithic and Early Bronze I. Provenience of artifacts was to “bag”, a subdivision of “locus” based on the lithological characteristics of deposits and spatial extent within each grid unit. We use record forms to document the lithological characteristics of sediments, excavation methods employed for each “bag”, levels, stratigraphic and spatial relationships, and other relevant information. We screened almost all archaeological deposits, with the exception of the uppermost sediment (i.e., plough zone), usually through a mesh with apertures approximately



1. Map of Wādī Ziqlāp showing sites mentioned in the text.



2. Map of al-Basātīn (WZ135) showing the location of excavated areas.

3mm. However, in order to reach the Late Neolithic levels more quickly, screening of many deposits in 2009 was less than 100%, and as low as 5% for some disturbed contexts, but this percentage is documented for each bag and locus.

Stratigraphy and Radiocarbon Chronology

Stratigraphic analysis, examination of finds, and a suite of radiocarbon dates indicate that there are three main stratigraphic levels at al-Basātīn, dating to the Late Neolithic (sixth millennium cal BC), Early Bronze I (fourth millennium cal BC), and Classical period (**Table 1**). Residual and surface remains indicate that there was some Epipalaeolithic and PPNB activity on or near the site as well. As noted elsewhere (Kadowaki *et al.* 2008; Gibbs *et al.* 2009) Late Neolithic radiocarbon determinations cluster

around 6680-6400 BP, indicating occupation about 5700-5300 cal BC, while those from Early Bronze Age deposits cluster around 4700-4600 BP, and suggest an EB occupation ca. 3700-3300 cal BC. Note that several samples from Late Neolithic contexts have produced dates that are clearly too late. These may be the result of rodent activity, tree roots or other natural processes introducing later material into Late Neolithic contexts or may reflect disturbances related to the continued use of the site during the Classical, and probably later, periods. Most of the problematic dates are from wood charcoal. More reliable Late Neolithic dates include two from residues from the interior of Late Neolithic sherds. These are from contexts that should be approximately contemporary with those that produced the problematic dates.

Table 1: Radiocarbon Determinations from al-Basātin.

Context	Material	Lab No.	Date BP	Comments
<i>Classical or later</i>				
P35 locus 008	Olive pit	TO-11994	1250 ± 50	
<i>Early Bronze contexts</i>				
N34 locus 003	Olive pit	TO-12024	4630 ± 60	
P35 locus 010	Wood xylum	Beta-208233	4550 ± 40	Silo contents
P35 locus 010	Olive pit	Beta-208234	4790 ± 50	Silo contents
P35 locus 010	Olive pit	TO-11995	4400 ± 60	Silo contents
P35 locus 010	Tree bark	TO-12422	4720 ± 70	Silo contents
P35 locus 010	Wood xylum	TO-12423	1270 ± 60	Intrusive
P36 locus 013	Wood xylum	TO-12025	5510 ± 130	Residual?
Q29 locus 008	Olive pit	TO-12027	4660 ± 60	
Q29 locus 010	Olive pit	TO-12026	4590 ± 60	Pool dates
Q29 locus 010	Olive pit	TO-12028	4570 ± 80	
<i>Neolithic contexts</i>				
P33 locus 022	Charcoal	TO-13123	5340 ± 170	Intrusive
P33 locus 024	Charcoal	TO-13124	5290 ± 60	Intrusive
P34 locus 010	Charcoal	TO-13094	6400 ± 80	
P39 locus 007	Charcoal	Beta-275083	8080 ± 50	Residual?
P39 locus 015	Charcoal	Beta-275082	5030 ± 40	
Q32 locus 022	Wheat	Beta-275081	320 ± 40	Intrusive
Q33 locus 014	Charcoal	TO-13093	6410 ± 510	
Q37 locus 006	Charcoal	TO-13092	6680 ± 60	
Q41 locus 016	Residue	TO-12151	6710 ± 70	
Q41 locus 016	Residue	TO-12738	6650 ± 140	
Q41 locus 018	Wood xylum	TO-12030	2030 ± 60	Intrusive
Q41 locus 018	Wood xylum	Beta-208231	2080 ± 40	Intrusive
Q41 locus 018	Wood xylum	TO-12029	2060 ± 60	Intrusive
R36 locus 006	Charcoal	TO-13091	6550 ± 60	
R41 locus 008	Wood xylum	TO-11992	2110 ± 60	Intrusive
R41 locus 009	Wood xylum	TO-12420	2040 ± 80	Intrusive
R41 locus 010	Wood xylum	TO-11993	2040 ± 60	Intrusive
R41 locus 010	Wood xylum	TO-12421	2030 ± 60	Intrusive

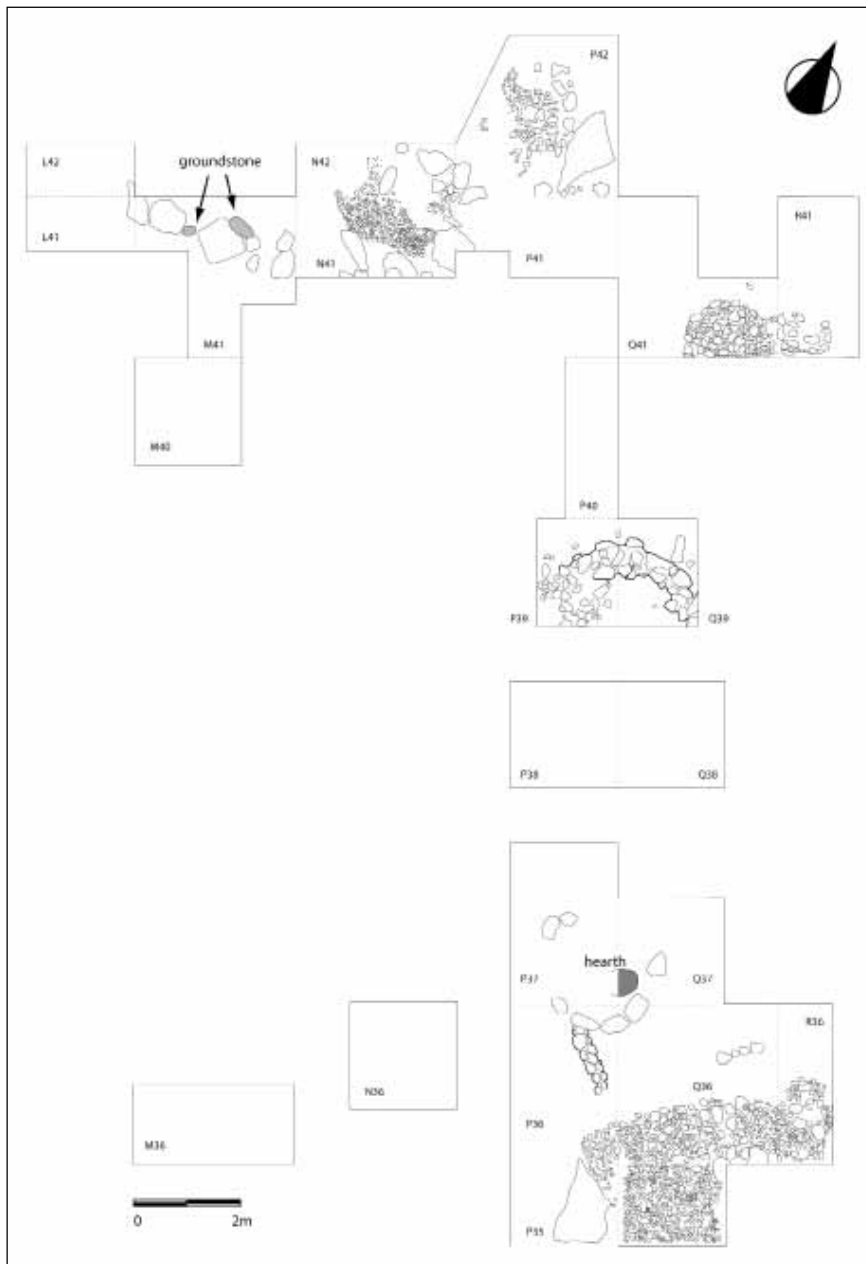
Architectural Features

Late Neolithic

Previous excavations at the site only rarely detected substantial architecture, and most of this consisted of rectangular or circular cobblestone floors with no associated walls (**Fig. 3**). There were also some short segments of straight walls and one instance of a small arc of stones in Area P36-Q37, with an associated burnt feature that may be a hearth, suggestive of a circular structure about 3m in diameter. In 2009, while most excavation areas again intercepted only outdoor areas with artifacts but no structures, there was a clear example of a circular, stone-walled structure in Areas P39 and Q39 (**Fig. 4**).

Although rectangular buildings appear to have been more common at Wadi ar-Rabah-related sites, including nearby Tabaqat al-Buma, it is noteworthy that circular structures 2-3m in diameter apparently occurred at the Jericho IX site of Lod (Gopher and Blockman 2004: 4).

Other features of the Late Neolithic include at least two stone-filled pits (Areas M23 and Q32) in addition to one previously discovered in Area R41. A possible cobbled floor was discovered in Area M33, but this is not as clear as ones discovered previously in Areas N41-42, P42, Q35-36, and Q41, and may simply be a stony colluvial deposit. Taking all the evidence together, it is now clear that there were both



3. Plan of Late Neolithic architecture.

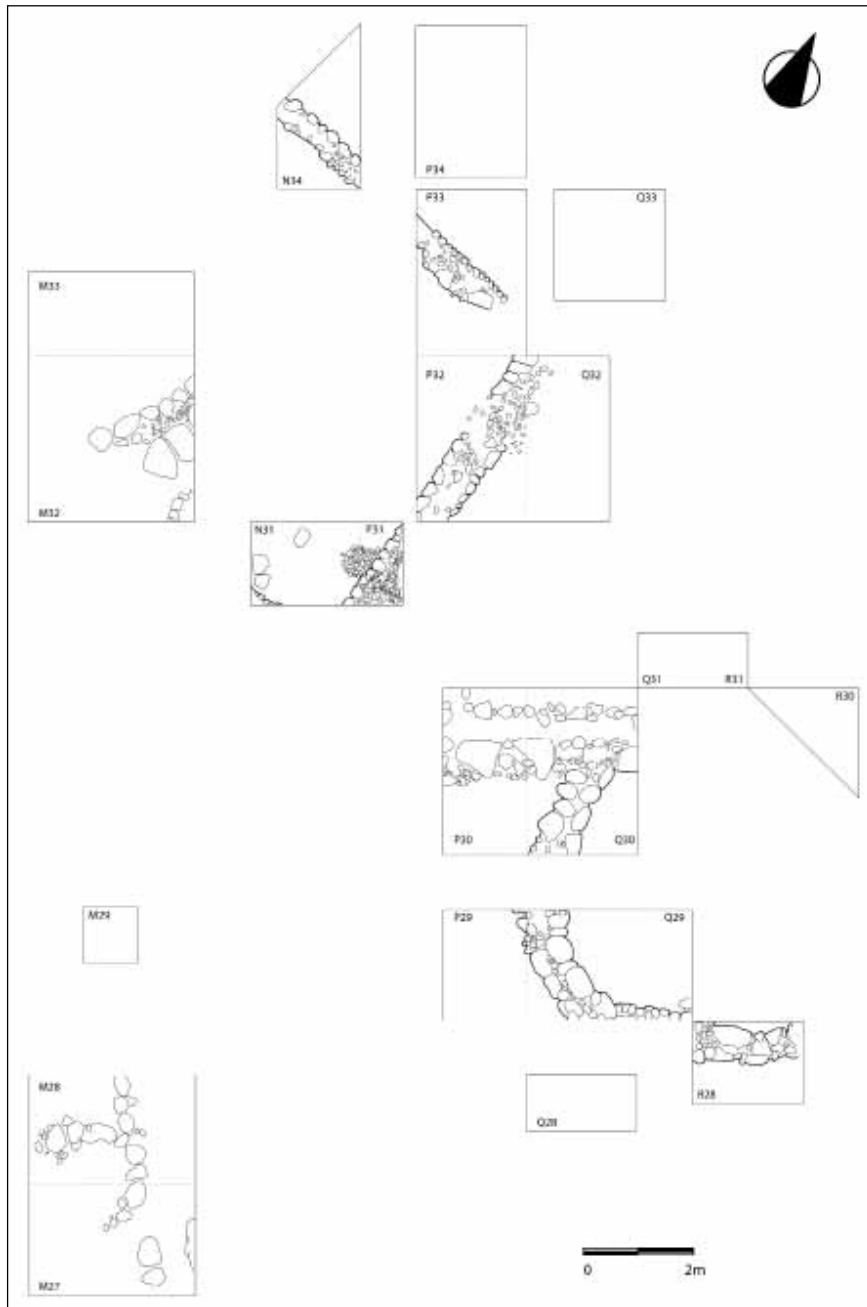


4. Circular Late Neolithic structure from Areas P39-Q39.

circular stone-walled structures and unwallled cobble floors or platforms, perhaps used as tent floors, at the site during the Late Neolithic. Interestingly, a similar cobbled platform accompanied the rechilinear houses of phase LN5 at Ṭabaqat al-Būma farther upstream (Banning *et al.* 1994; Blackham 1997; Kadowaki 2007).

Early Bronze I

Early Bronze Age architecture occurs in Areas M27-32, N31-34, P29-33, Q29-32, and R28-30 (**Fig. 5**). This includes a fairly well pre-



5. Plan of Early Bronze I architecture.

served, circular building, originally discovered in 2004 but more completely exposed in 2009. This has a double-leaf stone wall that is preserved in some places to three courses. Excavations in 2009 in Areas P30 and Q30 exposed two straight, parallel walls less than 1m apart, one of which abuts the circular building (**Fig. 6**). In Areas N34 and P33, previous excavations had uncovered a single-course double-leaf wall or foundation of a rectilinear Early Bronze struc-

ture. Excavation in Areas P32 and Q32 during 2009 uncovered a similar wall at right angles to it, suggesting that they may belong to the same building, but as they do not meet at the corner we cannot confirm this. However, excavation in Areas N31 and P31 to investigate the continuation of this wall found that it enclosed a room whose floor was carefully paved with EBI potsherds. A circular stone feature that might be a formal hearth was constructed on top of the



6. Part of Early Bronze I circular structure showing abutting rectilinear wall.

potsherd-paved surface and abutting a wall (Fig. 7). Segments of other EB walls were discovered in Areas M27-28 and M32-33.

Pottery

Late Neolithic

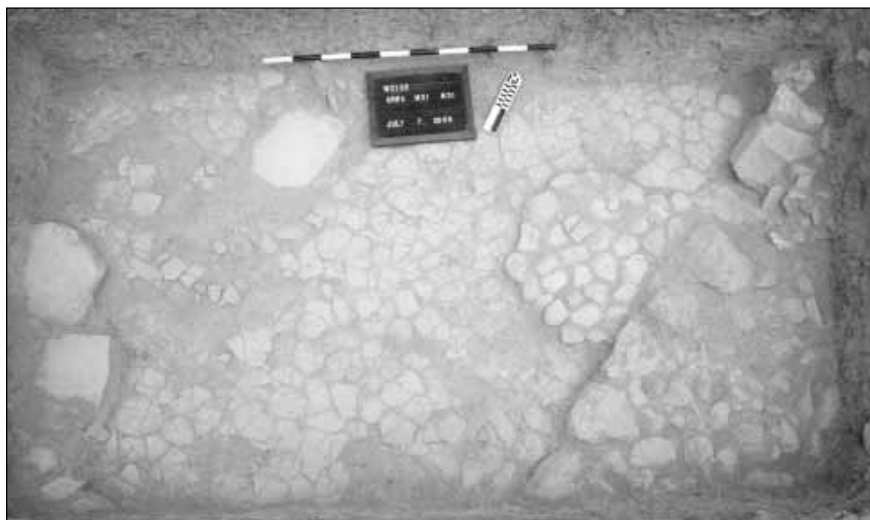
As in previous seasons, most of the Late Neolithic pottery consists of crudely manufactured, poorly fired, handmade pottery that is now extremely fragile (Kadowaki *et al.* 2008). Common fabrics are soft and brown, yellow or salmon-pink in colour, typically with distinct dark or yellow cores. Limestone and chalk inclusions are common, with smaller amounts of chert, iron oxides, and quartz, while some sherds show evidence of fibrous temper. Where sherds are large enough for forms to be recognizable, they include small cups, V-shaped and hemispherical bowls, holemouth jars, and there are

a few indications of necked jars (Fig. 8: 1-10). Handles include strap or loop handles, usually with oval cross-sections, and some knobs, small ledge handles, and triangular or pointed lug handles (Fig. 8: 15-19). Surface treatments include combing (Fig. 8: 19-23), often very rough but sometimes more regular with wavy, horizontal or alternating pattern (cross-combing or “weave combing”; Fig. 8: 21). Other vessels show fields of coarse, parallel incisions made with a stylus (Fig. 8: 25) or impressions made with circular or semi-circular implements and combs (Fig. 8: 24). Red slip occurs rarely, and red and black burnished sherds are rarer still.

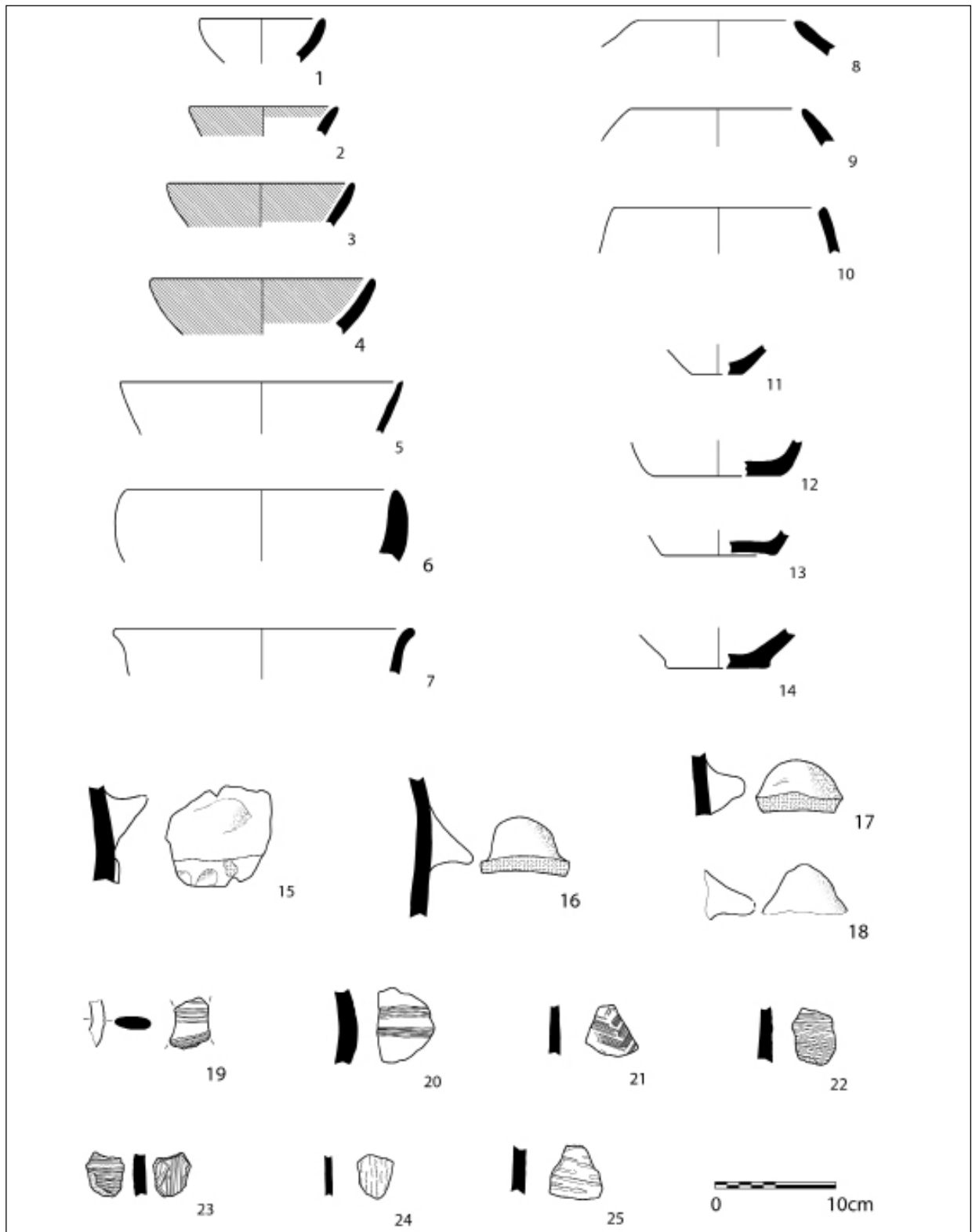
Although some elements are missing, such as clear examples of bow-rim jars, many characteristics of the Late Neolithic assemblage from al-Basātin are similar to those of Wādī Rabbah assemblages to the west, such as ones from Munhata 2A, Abu Zureiq, Nahal Beset I, and Tel Te’o, while its closest affinity is to phase LN4 at nearby Ṭabaqat al-Būmah (Banning 2007; Eisenberg *et al.* 2001; Garfinkel 1992; Garfinkel and Matskevich 2002; Gopher *et al.* 1992).

Early Bronze I

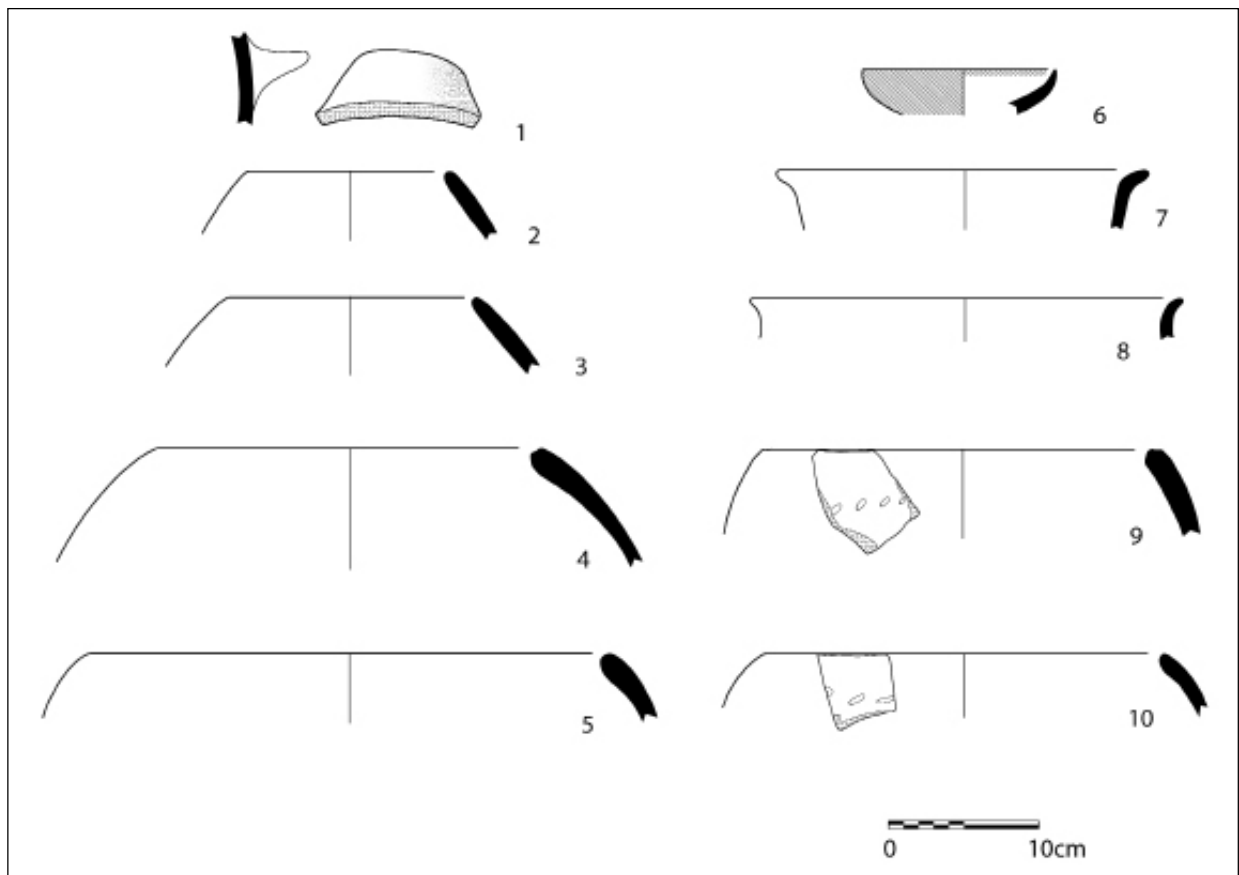
Early Bronze pottery from al-Basātin has general affinities to assemblages from sites that date early in EB I (Gibbs *et al.* 2009). Inverted rim sherds derive predominantly from holemouth jars although some of them could be large inverted *pithoi* (Fig. 9: 2-5, 9-10). Most of these have rounded or squared rims, occasionally thickened on either the interior or exterior



7. Early Bronze I room with potsherd-paved floor and possible hearth feature.



8. Late Neolithic pottery (from 2002-2006 seasons). Bowls (1-6); everted bowl or jar (7); holemouth jars (8-10); flat (11-12), concave (13) and disk (14) bases; ledge handles (15-18), one adjacent to possible impressed “rope” decoration (15); combed strap handle (19); combed body sherds (20-23); impressions made with a comb (24); incisions made with a simply stylus (25).



9. Early Bronze I pottery (from 2009 season). Ledge handle (1); plain (2-5) and decorated (9-10) holemouth jars; small bowl (6); everted bowls or jars (7-8).

surfaces. Everted shapes include vessels with flaring, rounded, and V-shaped profiles, some of which are certainly bowls while others are likely fragments of necked jars (**Fig. 9: 6-8**). Clear examples of necked vessels have everted rims or slightly inverted ones.

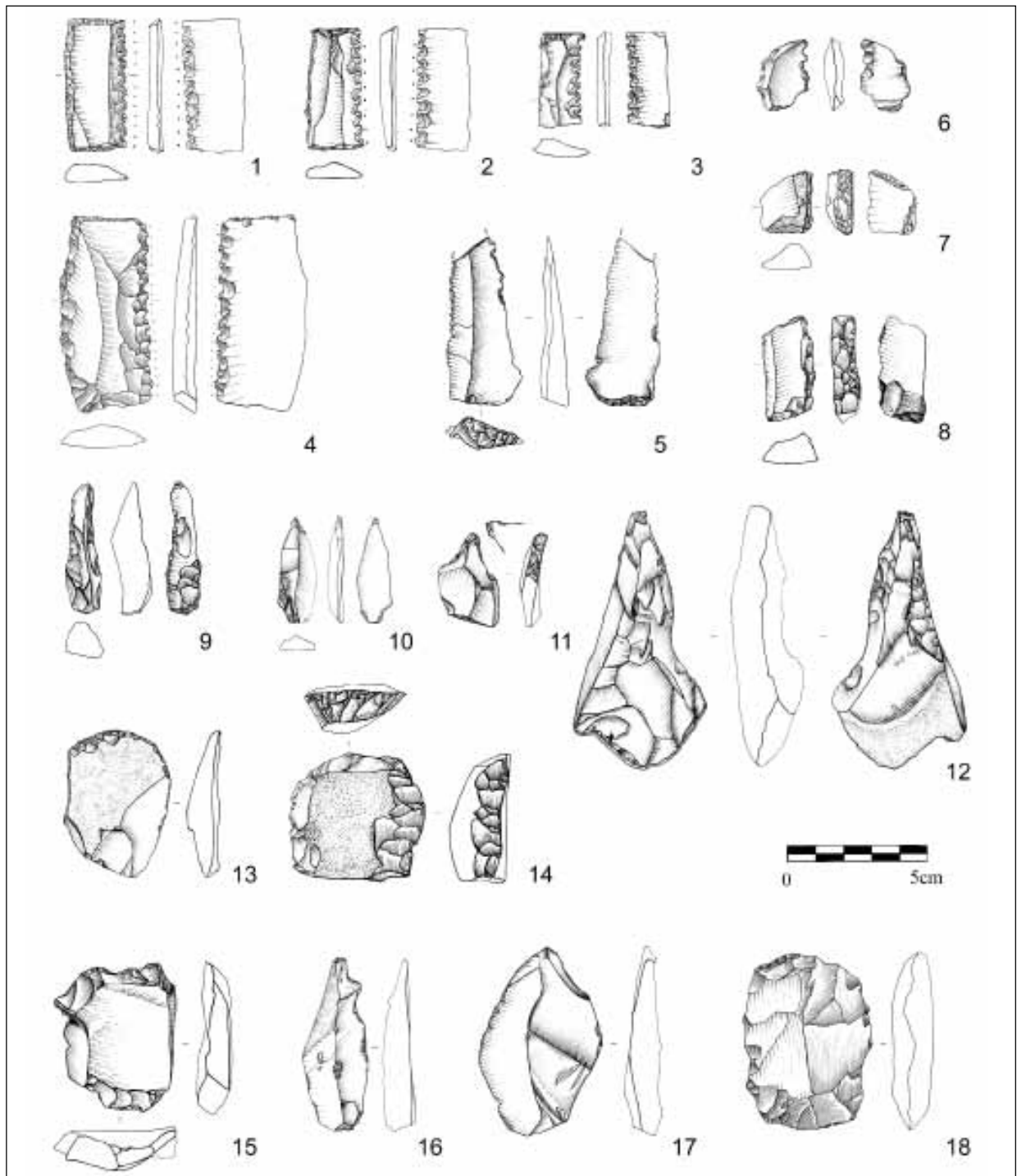
Handles include strap or loop handles, ledges, and small lugs. Ledges and lugs are generally simple (**Fig. 9: 1**), sometimes covered with a red slip although thumb-impressed ledge handles do occur. Bases are generally thin and flat or disks.

Red slip is the most common surface treatment and is found on both exterior and interior surfaces. The slip is rarely burnished. Holemouth jars, and more rarely bowls and everted-necked jars, are sometimes decorated with a band of oblique impressions or short incisions on the exterior surface near the opening of the vessel. More rarely, a band of circular impressions or short vertical incisions occurs. “Rope” appliqué also occurs in a band around the rim

of holemouth jars. In previously excavated samples there was one example of an impressed “piecrust” rim and a single body sherd with “grain-wash” surface treatment.

EB fabrics from the site are usually quite coarse, with large, angular inclusions of chert, calcite, and limestone. Fabric colours range most often among light gray, buff, and pale yellow, but dark gray, brown, pink, and even black sherds occur. Although the EB pottery is generally much better fired than the Late Neolithic material from the site, it is still often rather friable and gray cores in many sherds indicate incomplete oxidization.

Parallels for the impressed or incised jars at al-Basātīn can be found at sites with pottery attributed to the “Impressed-Slashed Ware” tradition (de Miroschedji 1971; Hanbury-Tenison 1986; Philip 2001; Stager 1992), including Tall Umm Ḥammād (Betts 1992) and Jāwā (Betts 1991), although certain important elements are



10. Late Neolithic chipped-stone artefacts. Sickle elements (1-4); Blades with regularly denticulated edge (5 and 6); Backed and truncated blades (7 and 8); Borers (9-12); Scrapers (13 and 14); Denticulate (15); Retouched blade (16); Retouched flake (17); Bifacial piece (18).

missing, including the characteristic pushed-up lug handles that are often found near the rim of holemouth jars from these sites. Gray-Burnished Ware, which is considered a characteris-

tic of early EBI sites in the northern part of the southern Levant (Amiran 1969; Philip 2008), is absent at al-Basātīn. This may represent regional variation, with impressed and slashed deco-

ration being more common east of the Jordan River and Gray-Burnished Ware more common to the west (Joffe 1993: 39). The impressed and slashed decoration and the absence of Grain-wash (Band-slip) pottery, combined with the radiocarbon evidence, suggests that the site was occupied quite early in EBI.

Lithics

Late Neolithic

The Late Neolithic deposits excavated in previous field seasons contributed more than 22,000 chipped-stone artefacts, to which the 2009 excavations have added an estimated 5,000, most of which consists of unmodified waste flakes. They are made of locally available flint, which includes brown to beige, fine-grained flint cobbles and dark brown flint nodules with chalky white cortex as well as medium to coarse-grained flint angular cobbles of greyish brown colour (Kadowaki *et al.* 2008: 113). Despite the wide range of raw material types, all of them were primarily exploited for the production of flakes from single or multi-platform cores. However, the core-reduction of fine-grained flint sometimes involved intentional blade production by unidirectional flaking from single-platform blade cores.

Retouched tools from previous seasons account for less than 3% of the Late Neolithic assemblage of al-Basātīn and consist mainly of informal flake tools such as retouched flakes, scrapers, denticulates, and notches (**Fig. 10: 13-15, and 17**). Although some of the scrapers are made on cortical flakes, their plan forms and retouches on the edge are less standardized than EB tabular scrapers. More standardized tools include sickle elements, retouched blades, borers, and truncations, which are often made on blades (**Fig. 10: 1-12, and 16**). Of these, sickle elements are the most abundant and have a rectangular shape formed by steep retouch at one lateral edge and the truncation of both ends of blades or flakes. The cutting edges of sickle elements have denticulations and often exhibit sickle sheen. Most samples from al-Basātīn can be classified to Gopher's types C/E or D (Gopher 1989; Barkai and Gopher 1999). One of the backed bi-truncated sickle elements from the 2009 season, measuring 7.1cm in length and 3.2cm in width (**Fig. 10: 4**), is distinctive-

ly larger than the rest of the sickle elements, which range from 2-6cm in length. In addition, backed blades, sometimes with truncated ends, share techno-morphological traits with sickle elements (**Fig. 10: 7 and 8**), although the former type does not show sickle sheen. It is also notable that some blades, mostly made of fine-grained flint, are regularly denticulated, sometimes by bifacial flaking, on their cutting edge (**Fig. 10: 5 and 6**). Some of the denticulated blades are also backed or truncated (**Fig. 10: 6**). These pieces are likely to be unfinished sickle elements because of their similarity to sickle elements in the selection of raw material (fine-grained flint), the blank form (blade), and the retouch techniques (denticulation, backing, and truncation). The morphology of borers varies depending on the blank form, the presence of shoulders, and the length of the tip. A massive borer (**Fig. 10: 12**) is made on a large cortical flake, shaped by bifacial flaking. Similarly large borers are known from other Wadi Rabah assemblages, such as Nahal Zehora I (Barkai and Gopher 1999: 105-109).

In addition, the 2009 excavations also increased our samples of Neolithic bifacial tools. One of them is a chisel with a ground edge. It is shaped by bifacial flaking into an elongated rectangular form with a trapezoidal cross-section. Another bifacial piece is broader (**Fig. 10: 18**) and shows a biconvex profile. However, the edges of this specimen are still jagged, leaving coarse flaking scars, and not ground like the other axes. This pieces thus may represent an unfinished stage.

Late Neolithic groundstone artifacts from the 2009 season include a large fragment of a concave basalt grinding slab from the bottom of a rock-filled pit in Area Q32, as well as some basalt fragments of uncertain form. On comparison with artefacts from previous seasons, it is likely that some of these come from loaf-shaped upper and lower milling stones.

Early Bronze I

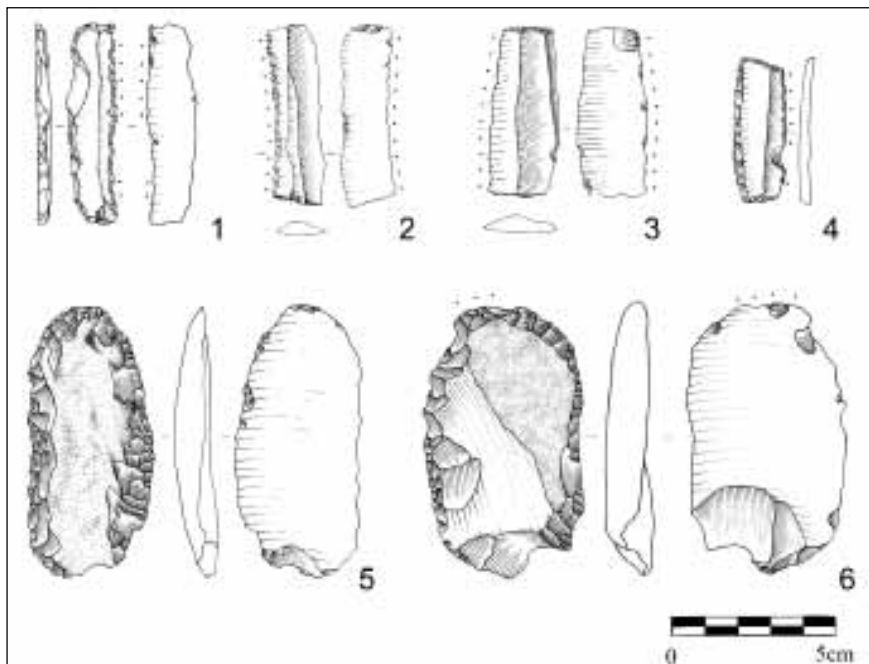
More than 9,000 chipped-stone artifacts were recovered from Early Bronze Age deposits in previous seasons at the site, to which the 2009 excavations contribute about 3,500 more. The excavations near the EB structures added several more Canaanite blades and tabular scrapers

to our previous collections. Canaanean blades that still retain a proximal end show faceting on their striking platform, and the overhang at the platform edge is rarely removed. Some of the Canaanean blades are retouched and/or show sickle gloss on the edge (**Fig. 11: 1-4**). One of the tabular scrapers from this season also has a small glossy area at the distal edge (**Fig. 11: 6**). Both of these tool types are made of brown, fine-grained flint with chalky cortex. Although this raw material (probably Eocene flint) is locally available, the debitage assemblage does not indicate their production on site. Instead, the core-reduction technology at this site is oriented towards the production of flakes and coarse blades, which provided blanks for informal tool types, such as scrapers, notches, and denticulates.

Sickle elements that can be attributed to the Early Bronze Age are made on regular blades with fine or no denticulation on their cutting edges (Gopher's Type E or F: Gopher 1989; Gibbs *et al.* 2009). Some are made on Canaanean blades without backing retouch (**Fig. 11: 2 and 3**), while others have a straight or arched backed edge, sometimes with truncated ends (**Fig. 11: 1 and 4**). The Early Bronze Age deposits also include residual Neolithic and Epipalaeolithic artifacts that originate in underlying layers.

Groundstone artefacts from the previous excavations in Early Bronze Age contexts included about 20 pieces, including handstones, a pestle, and fragments of stone vessels, mostly made of basalt. The 2009 excavations added more of these, including a large base fragment of a limestone vessel from Area R28, the rim of a straight-walled basalt mortar also from R28, another basalt mortar or vessel fragment with a more curvilinear profile from M33, and a fragment of a loaf-shaped upper milling stone, possibly a Neolithic residual, from Area M32. Other minor tool types found in all seasons include worked cobbles and pounders of limestone or flint.

As in previous excavations, the 2009 ones also recovered chipped-stone materials that clearly belong to earlier periods, most of which are clearly Epipalaeolithic artifacts, notably including retouched and unretouched bladelets and bladelet cores. Both narrow and wide bladelets appear, but none exhibit retouch that would indicate any particular complex of the Epipalaeolithic. A few artifacts also indicate an origin in some nearby PPNB occupation. In 2009, these include a broken Amuq point, recalling the discovery of broken points in 2006, and the 2004 surface finds of a naviform core and an axe of PPNB type (Kadowaki *et al.* 2008: Fig. 7).



11. Early Bronze Age chipped-stone artefacts. Sickle elements on Canaanean blades (1-4); Tabular scrapers (5 and 6).

Fauna

Faunal remains found at al-Basātīn are highly fragmentary and usually difficult or impossible to assign to a skeletal element or taxonomic Family. Preliminary analyses of both the Late Neolithic assemblage (Kadowaki *et al.* 2008: Table 5) and the Early Bronze one (Gibbs *et al.* 2009) from the 2004 and 2006 excavations show fairly strong similarity. This similarity is likely due, in part, to the fact that sheep, goats, or both were the primary economic foci of the pastoral economy in both periods, distantly followed by pigs. However, it is also likely that some of the faunal remains in the EB I deposits are residual from the Late Neolithic levels, which would tend to blur the differences. Faunal remains from the 2009 season await analysis.

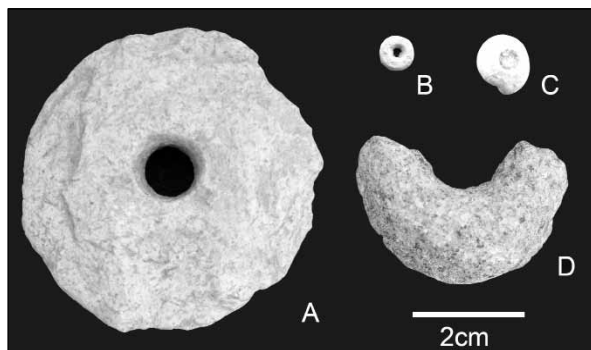
Small Finds

It is noteworthy that some beads found in Early Bronze deposits in 2009 recall the earlier discovery of numerous tubular objects, consisting both of the truncated shafts of bird bones and natural plant casts from local travertine deposits, in and around the curvilinear EBI building first excavated in 2004. One of these from an EB deposit in M23 is tubular, appears to be a truncated bone diaphysis with a diameter of 6mm and length of 10.6mm, and seems identical to some of those discovered earlier. Another, from P32, is a pierced disk with a diameter of 6.6mm and thickness of 1.8mm (**Fig. 12: B**); its material has yet to be identified. A helicone shell pierced at one end (**Fig. 12: C**) that was found in an EB deposit in R28 may also have been used as a bead or sewn onto clothing. Although others may be identified during further faunal analysis, so far the only bone tools identified are

four fragments of apparently worked bone from two Late Neolithic contexts in P32. In EBI contexts in Areas M23 and M33 excavations produced a small number of possible crucible fragments. These have green residue that is likely copper. Other interesting small finds include a flaked and pierced limestone disk from an EB deposit in R28 (**Fig. 12: A**), a fragmentary basalt pierced weight from an undated deposit in J7 (**Fig. 12: D**), and a similar one found in a Late Neolithic context in M28.

Discussion and Conclusions

The 2009 excavations at al-Basātīn, taken in conjunction with previous results, suggest that the site was a farmstead or small hamlet in the Late Neolithic and a hamlet or small village in Early Bronze I. In both periods, the architecture is sparsely distributed on the site, is likely domestic in nature, and consists of a mixture of circular and rectilinear buildings and outdoor activity areas, while the Late Neolithic settlement also exhibited a number of formally cobbled surfaces, either round or rectangular, that could have been for storage or to serve as the floors of tents or other less substantial structures. In both periods, lithics include sickle elements and groundstone that point to the processing of grain, while the discovery of olive pits, some of which were directly dated to the EBI while a few were found in Late Neolithic deposits, suggests the exploitation of wild or domesticated olive. Predominant *Ovis/Capra* remains in the faunal assemblages fit expectations that herding of sheep, goats, or both was economically important, although we should be mindful of the likelihood that, in terms of meat yield, cattle were probably more important than our small sample of identifiable specimens would seem to suggest (Grigson 1995). Even considering that much of the fauna from the EB levels at al-Basātīn could be residual, the similarities between the Late Neolithic and EBI faunal assemblages are striking. Both pottery assemblages include fairly coarse jars (rather larger in EBI) as well as smaller bowls, as we would expect in a domestic environment, for storage, cooking, and serving. Pierced disks made from body sherds or stone are found in both LN and EBI deposits and could have been spindle whorls used in textile production.



12. Small finds. EB flaked and pierced limestone disk (A); EB bead (B); EB pierced shell (C); LN weight (D).

It is also interesting to note that the reoccupation of Wadi Rabah-related sites during the Early Bronze Age, after more than a millennium of abandonment, is not uncommon in the broader region. Much as at al-Basātīn, we find this pattern at Yiftah'el, Jezreel, Qiryat Ata, and Telulyot Batashi, while at Tel Qiri and Tel Te'o there was also a period of Late Chalcolithic occupation (Baruch 1997; Gopher and Shlomi 1997; Kaplan 1958; Khalaily 2003). This calls for investigation of the forces that may have caused this pattern, particularly as Chalcolithic sites are not at all uncommon in the vicinity of sites occupied only during Wadi Rabah and EBI.

Excavations at al-Basātīn contribute towards understanding early EBI occupation in the highlands of northern Jordan and how this occupation related to the rest of the southern Levant. Our reconstruction of al-Basātīn as a largely self-sufficient, and somewhat isolated farmstead or small hamlet is consistent with Joffe's (1993) suggestion that the early EBI was a period in which reorganization of settlement favoured small, agricultural sites (see also Braun 1985: 103). It is also possible that al-Basātīn was an element of a settlement expansion into areas with potential for olive production and other forms of arboriculture. Colonization of areas with good potential for olive groves appears to have begun in the Chalcolithic (Banning *et al.* 1998: 155; Bourke 2001; Epstein 1993; Hanbury-Tennison 1986: 87; Lovell 2002; Mabry and Palumbo 1988: 189, 1992: 68-69), and olive was undoubtedly even more economically important only a little later in the Early Bronze Age, so there is some reason to suspect that EBI settlement expansion in this region was related to the olive industry (Philip 2001: 192). The somewhat later use of Tall Rākān II (WZ 130), probably an EBIB olive-oil factory (Banning *et al.* 2008), would also fit this view.

While there has yet to be much work on early EBI sites in the highlands of northern Jordan, similar sites do occur in other parts of the southern Levant. Parallels for the round structure can be found at a number of EB sites in the southern Levant, including Jabal Abū ath-Thawwāb (Kafafi 2001: 74, 89), al-Hissi (O'Connell and Rose 1980), Tall ash-Shūna North (Philip 2001:178), and Lod (Kaplan 1977:573). Pottery with impressed and slashed decoration occurs at Tall

ash-Shūna North (Philip 2008:199), Tall Umm Ḥammād (Betts 1992) and Jāwā (Betts 1991), although each of these sites has pottery that is not paralleled at al-Basātīn.

As we have pointed out elsewhere (Gibbs *et al.* 2009) a strong tendency toward regionalism in EBI makes it all the more important to investigate this period locally rather than assuming that it will be much the same as in other parts of the southern Levant. In addition, it is important to keep in mind that the well-watered highlands of northwestern Jordan would have made the region especially attractive to Early Bronze Age producers of grain and olive oil, just as it is today. In that context, it is somewhat surprising that so little work has been done on this period in the north relative to more arid parts of Jordan.

For the waning centuries of the Late Neolithic (or Early Chalcolithic), the relative deficiency of information for northwest Jordan is even more striking, especially relative to comparable regions west of the Jordan River. Apart from small exposures in the deepest levels at Abū Ḥāmid in the Jordan Valley (Lovell *et al.* 1997), Pella on the valley's edge (Bourke 2007; Bourke *et al.* 2003), and perhaps Tall ash-Shūna North (Gustavson-Gaube 1986), virtually nothing is known about the sixth millennium cal BC in northwestern Jordan except in Wādī Ziqlāp. Since al-Basātīn seems to contrast in some ways with its contemporary neighbour of Tabaqat al-Buma (Kadowaki *et al.* 2008), it seems important to investigate other small sites of this period in northern Jordan so that we can begin to understand the reasons for the variability and the possible tendency for most people to have occupied relatively small and dispersed sites rather than large villages, as they did in both preceding and following eras, even though there are rarer examples of large Wadi ar-Rabah sites, such as Beisamoun (Rosenberg *et al.* 2006). We hope that our results from al-Basātīn will help to stimulate such work.

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