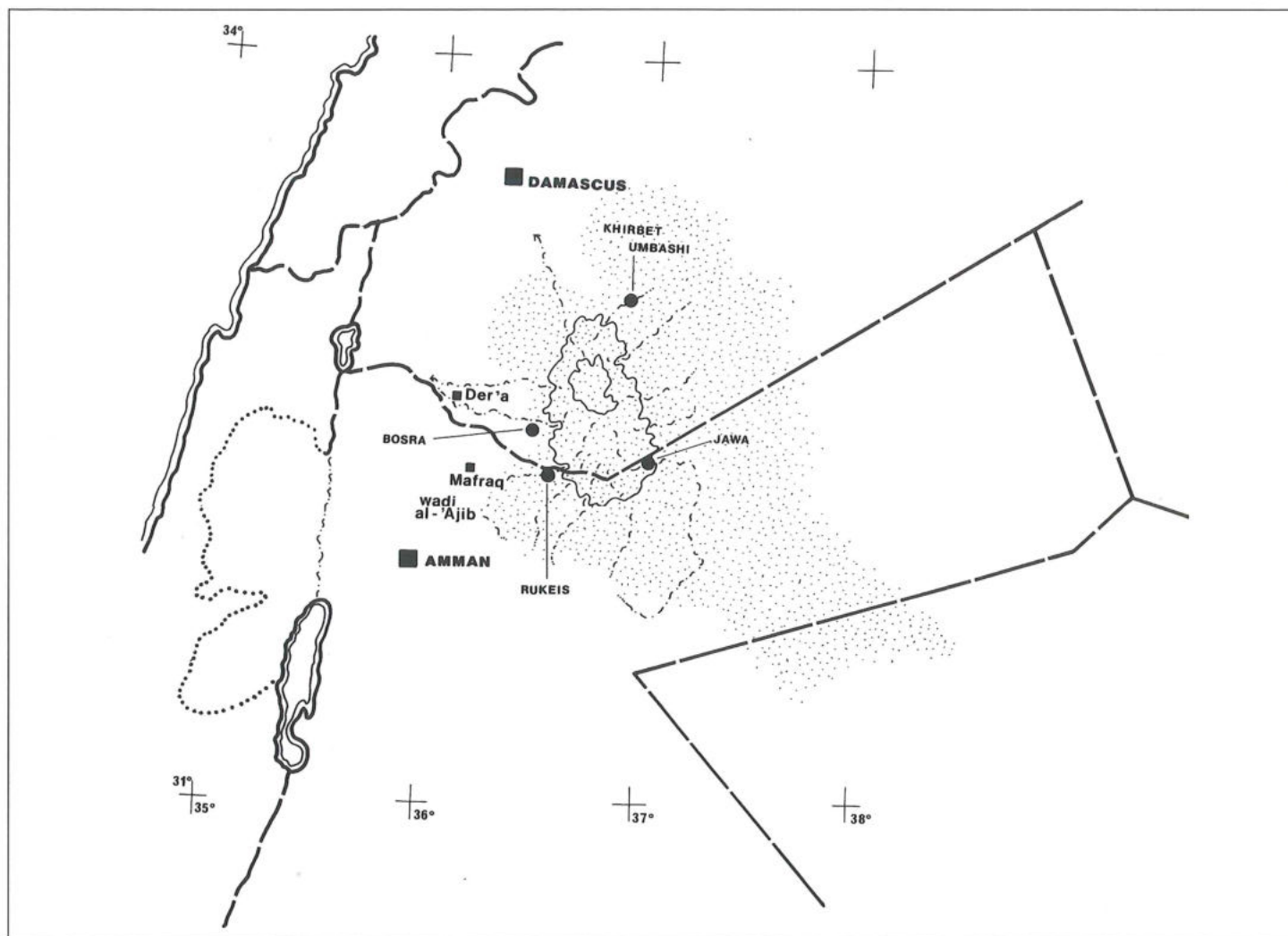


A Middle Bronze Age Landscape: Occupation and Resource Management in the Wādī al-‘Ājib, al-Mafraq

The large district of plain and mountain generically known today as the Ḥawrān stretches from south of Damascus to northern Jordan and encompasses three geographically distinct regions: the Leja, the Nuqrah and the Jabal Ḥawrān, Jabal al-‘Arab or Jabal ad-Drūz (FIG. 1). The Ḥawrān is situated within the transitional zone between well-watered valleys to the west and the semi-desert or steppe region (*bādiyah*) to the east. Average rainfall within the transitional zone is between 200 mm and

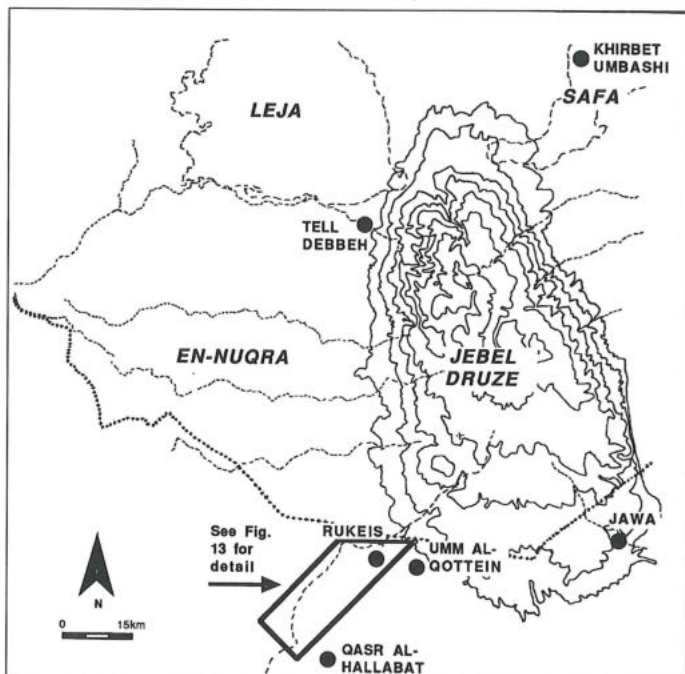
350 mm a year and the major type of agricultural activity in the region is dry farming. The range of crops that can be grown in this manner is greater in the west, where rainfall is about 350 mm a year. As rainfall decreases towards the east, little can be grown without irrigation except for wheat and barley, which are the predominant crops. The grazing of animals, particularly sheep and goat, is also widely practised throughout the region.

The Wādī al-‘Ājib cuts down the south-western slopes



1. Map of Syria and Jordan showing the geographical location of the Ḥawrān.

of the Jabal ad-Drūz and crosses the border between Syria and Jordan west of Umm al-Quṭṭayn. From here it runs in a south-west direction, eventually draining into the mud-flats near Qaṣr al-Hallābāt (FIG. 2). In 1992 and 1993 preliminary studies undertaken by a University of Sydney team under the direction of Alison Betts involved an area survey of the upper Wādī al-‘Ājib in the al-Mafraq district, just south of the Syrian border (Betts *et al.* 1995, 1996). During the 1993 season the fortified Bronze Age site of Rukeis was chosen for further investigation and a small sounding was made. This was followed up in 1994 by an eight-weeks excavation season at Rukeis and further area survey of the upper wadi system (Betts *et al.* 1995, 1996). The aim of the project is to investigate the nature of settlement and land use in this region, particularly during the Middle Bronze Age.



2. Detailed map of the Hawran showing the Wādī al-‘Ājib and the location of Rukeis.

Rukeis Excavation Results

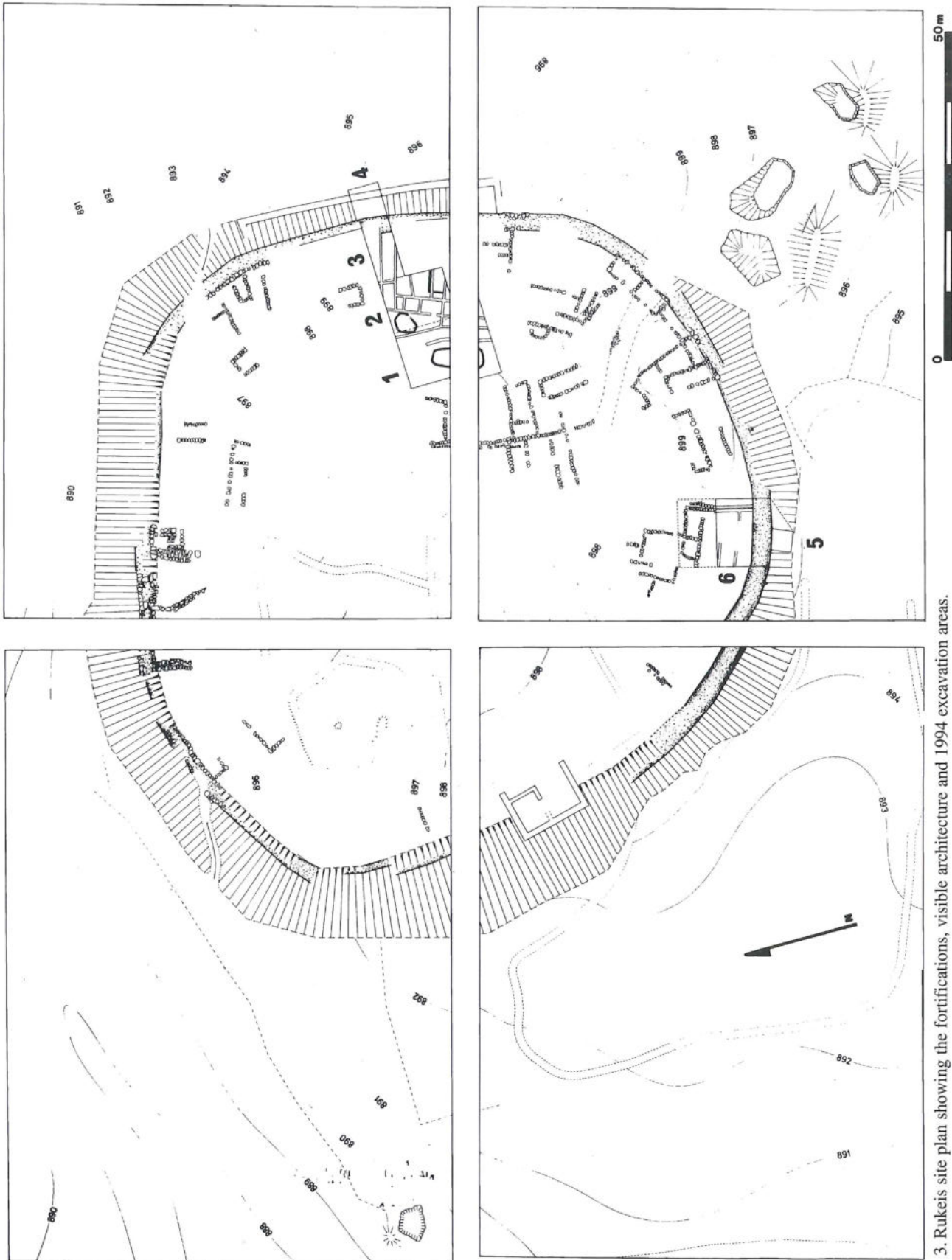
Rukeis is situated on the upper Wādī al-‘Ājib, north of the village of ad-Dafiyānah. The site consists of a large walled citadel, with traces of a lower town on the south-western side (FIG. 3). Initial investigation of the site suggested that much of the occupation consists of relatively undisturbed Middle Bronze Age deposits and includes massive, well-preserved fortification walls and traces of stone architecture visible on the surface. A later structure, a square building of cut basalt masonry, overlies the fortification wall at the western end of the citadel and may have been a small watch-tower dating to the Roman/Byzantine period. Evidence of canals and ancient field systems in the wadi may relate to occupation at the site, though to which period is uncertain.

During the 1994 excavation season five trenches were opened. Trenches 1, 2 and 3, which were situated on the east side of the top of the tall, combined to make up a total area of approximately 210 m² (FIGS. 4 and 5). The excavation area extended from the inner face of the main fortification wall westward towards the centre of the mound. Trench 1 consists of an open area with a number of circular stone-lined pits. One of these had partially been excavated as a sounding during the 1993 season (Silo 1). The pit, which may have been a silo or storage bin, is approximately 2.5 m in diameter and is stone lined to a depth of 2.2 m, where the walls were abutted by a layer of flat stones. It is unknown whether this represents the bottom or not as the layer of stones were not removed. While the majority of the ceramics from the silo date to the Middle Bronze Age, several finds suggest the silo was used and possibly filled in during the Iron Age or later. Other circular stone walls in this area may represent similar features. One of these was partially excavated to a depth of 0.5 m, revealing several courses of stone (Silo 2). Lying north-south along this area are a number of isolated walls, the function of which is not clear. These walls, which lay very close to the modern surface and had no reliably associated occupation deposits, may represent a later phase of construction as most are out of alignment with underlying walls.

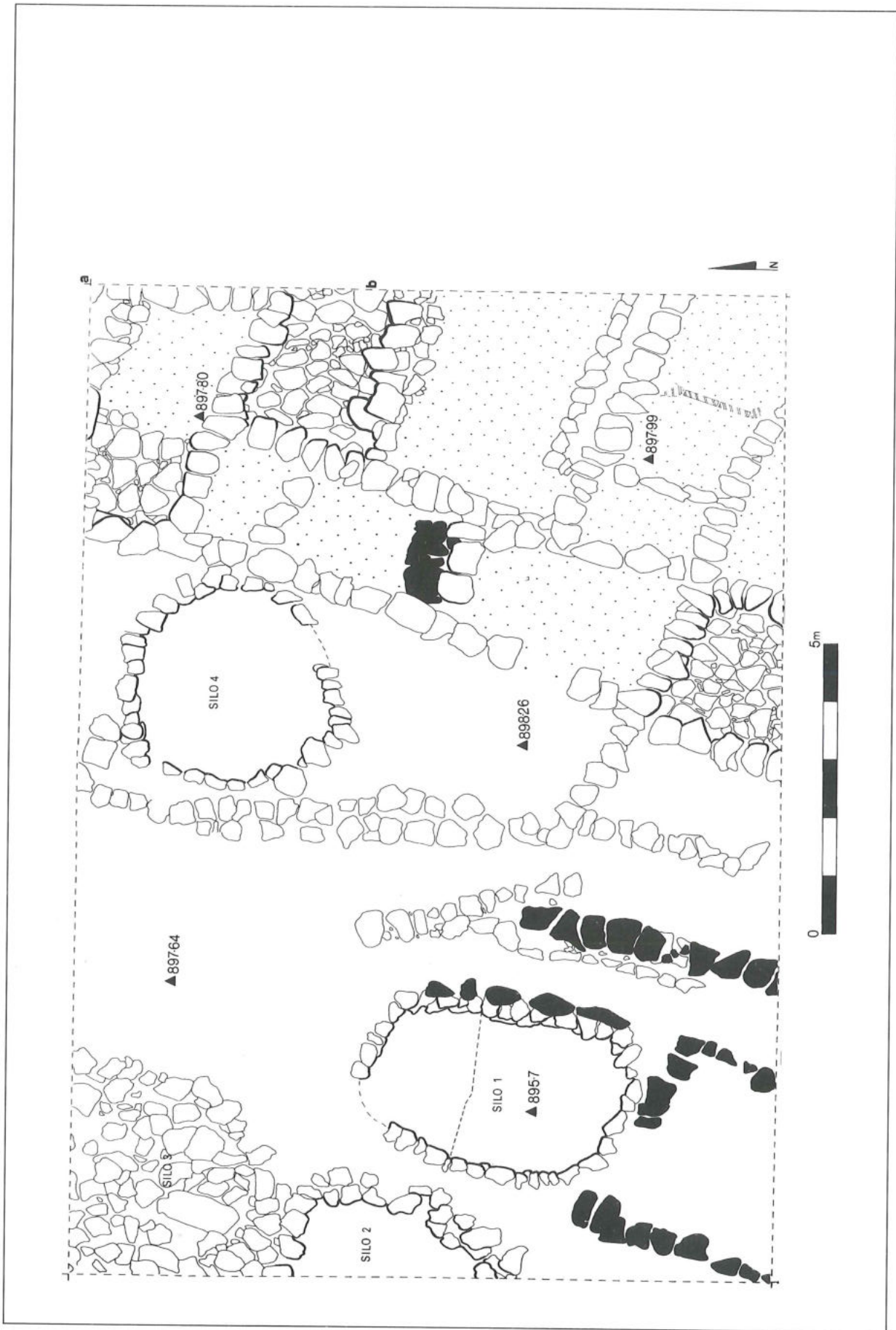
In Trench 2 part of a large complex with stone-built walls and small rooms was uncovered. At least one of the walls ran up to the inner face of the main fortification wall. Several phases of rebuilding could be identified within this complex, not all of which have been clearly defined. There is evidence for later subdivision as in most rooms the lowest occupation deposits abut only one, two or three of the walls, while the remaining walls are at a higher level. Some of the rooms have stone-paved floors. These have not yet been lifted so it is not clear if they belong to the first use of the structure, or represent later phases. Some rooms also have blocked doorways, and one has a thin mudbrick division across it. Several large rectangular-shaped stones may represent the remains of collapsed corbelled roofing. Broadly, this sector contains a large multicelled structure of uncertain function which was in use over a period of time, during which it was reshaped several times.

An extension of this area was opened in Trench 3 up to the inner face of the fortification wall (FIG. 5). A small sounding in this area uncovered a stone-paved floor also abutting the inner face of the main fortification wall and the bottom of the wall of the main structure, which was preserved to 5 courses. Below this construction phase was an ashy deposit, and several layers of fill, excavated to a depth of almost three metres.

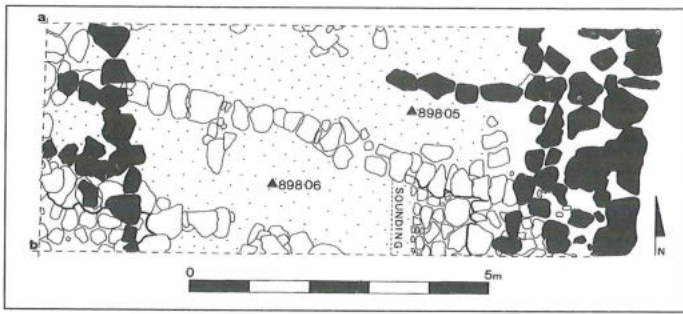
Trench 4 was opened up as an area of clearance against the outer face of the main fortification wall to the east of trenches 1, 2 and 3. Clearance of fallen rubble revealed an outer, well-built stone wall running parallel to the main fortification wall. A complete doorway was uncovered



3. Rukeis site plan showing the fortifications, visible architecture and 1994 excavation areas.



4. Plan showing the combined area of Trenches 1 and 2 with several silos to the west of the main complex.



5. Plan of Trench 3 showing the extension from the main complex to the inner face of the fortification wall.

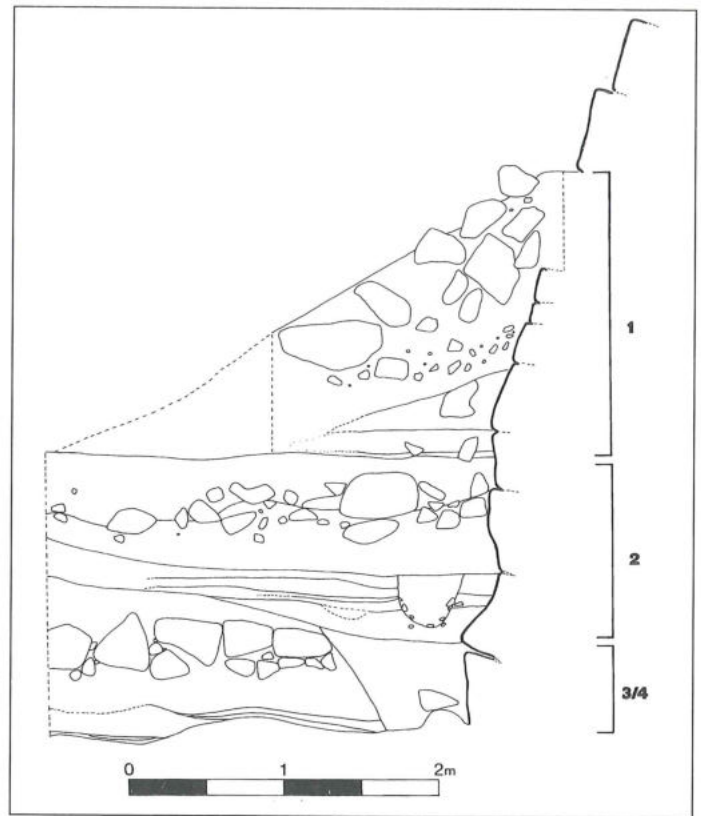
which had two stone lintels preserved *in situ*. Excavation between the two walls revealed traces of collapsed corbelling which may have formed part of the roof covering the rooms between the walls. This area was only partially excavated and a date for the structure cannot yet be established.

Trenches 5 and 6 were opened up on the southern side of the tall. Excavation of Trench 6 began by the removal of topsoil over an area of about 300 m² extending from the inner face of the main wall towards the centre of the mound. Clearance of this area revealed a series of rectangular rooms. Two of these, which were adjacent to the main wall, had stone-paved floors. One had a stone lined *tābūn* against the outer wall, within which sat a partially complete coarse ware vessel. This area was only partially excavated.

Trench 5 was situated against the outer face of the main fortification wall. It consisted of collapse from the main wall interspersed with wind blown silt. This overlies a layer of ashy soil with deposits abutting the wall, below which is an earlier stage of collapse again lying on windblown silt above layers of cultural deposit. Below this is a cut against the main fortifications which appears to be a foundation trench (FIG. 6). The trench is cut into earlier occupation levels represented by a rounded stone structure with pisé packing against the outer face of the walls. On the basis of ceramic evidence, these levels are dated to the EB IB period.

Preliminary analysis of the results of the 1994 excavations at Rukeis indicate that the site was settled by the Early Bronze Age, but that the main period of occupation was during the Middle Bronze Age. The site appears to have been abandoned in the late Middle or early Late Bronze Age. It was then apparently reused during the Iron Age, sometime in the eighth to tenth century, although the extent and nature of the Iron Age occupation is unclear. The site was also used during the Late Roman/Byzantine period to which the fort on the western side of the tall belongs.

There are few excavated Middle Bronze Age sites in Jordan from which comparisons with Rukeis can be drawn, but several similarities can be seen at the site of Abū Snaslah (Lehman *et al.* 1991; Kerner *et al.* 1992). Like Rukeis, Abū Snaslah, which is located east of



6. Section of Trench 5 on the outer face of the fortification wall showing the successive deposits and foundation trench.

‘Ammān at the confluence of the Wādī Irmidān and Wādī al-Qaṭṭār, is situated in a marginal region where agriculture reliant on rainfall is limited to areas along wadi tributaries, and where annual rainfall is sufficient only for simple agricultural systems. This region is also similar to the Ḥawrān in that almost no excavations have taken place here, except for salvage work at Saḥāb (Ibrahim *et al.* in press).

During excavations carried out in 1990 at the site of Abū Snaslah, substantial Middle Bronze Age architectural remains were revealed, including a rectangular building thought to be a house (Lehmann *et al.* 1991; Kerner *et al.* 1992). The house (house 1), which is constructed of large limestone blocks, shows evidence of internal partitioning, as seen by the existence of a subdividing wall and at least one phase of restoration or rebuilding with the existence of a number of small, possibly later additional walls to the south. Two stones found in the centre of the building may have acted as pillars that held wooden posts to support a roof, while there is evidence of at least one blocked doorway. The remains of several other walls similar to those of house 1 may be part of other houses, while to the north wider and more heavily constructed walls appear to have had a different purpose and are provisionally considered to be terracing walls. The preliminary interpretation of the Middle Bronze Age remains at Abū Snaslah is that they appear to be largely domestic in nature. Due to a general lack of painted Middle Bronze Age pottery, Lehmann *et*

al. (1991: 59) see the site as a "provincial" settlement. While Abū Snaslah appears to have been slightly different in nature to Rukeis it is one of the few recently excavated Middle Bronze Age sites in Jordan that has revealed similar architectural remains.

Ceramics, Small Finds and Ground Stone

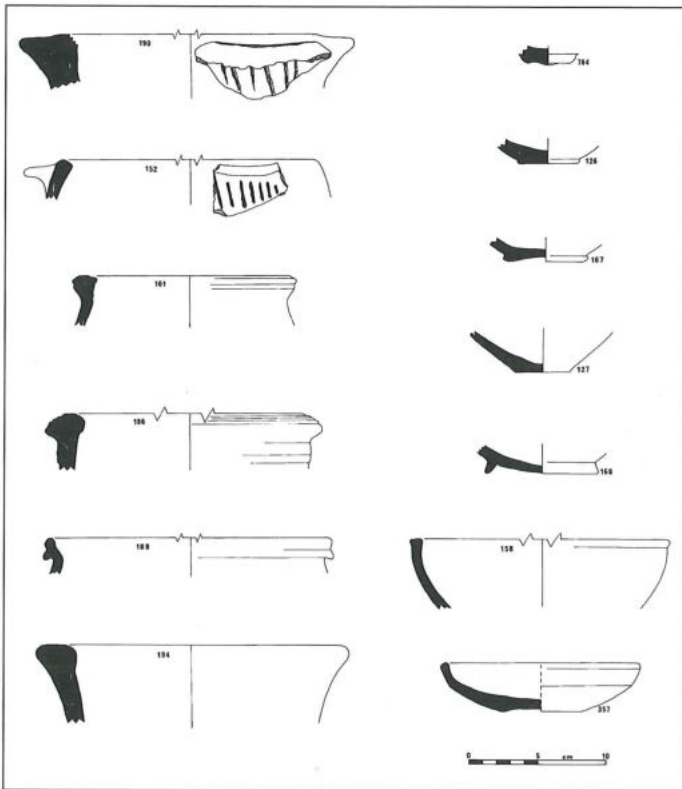
The 1993 and 1994 excavation and survey seasons at Rukeis produced a substantial amount of ceramic remains. An analysis of these ceramic finds has resulted in the beginnings of a Rukeis ceramic type series or shape typology. Thus far, a total of 975 diagnostic and 6671 body sherds from Rukeis and 49 diagnostics from the survey of the Wādi al-‘Ājib has been recovered and processed.

The excavation of the five areas recovered diagnostic sherds of all forms of ceramic vessels (FIGS. 7-9). Over half of the ceramic fragments are from storage vessels such as bowls, jars, short-necked and tall narrow-necked jars, while fragments of fine and domestic types are few with Cooking Pot ware in use for the making of storage jars, as well as cooking pots (see below FIG.11). Preliminary analysis of these diagnostics has shown that with relatively few exceptions, the majority of the ceramic material from Rukeis dates to the Middle Bronze Age, in particular the later Middle Bronze period - the MBIIC. Ceramics from the Late Bronze, Iron, Byzantine and Roman periods are also represented at Rukeis. (FIG.10) The Iron Age ceramic material awaits further analysis. A large portion

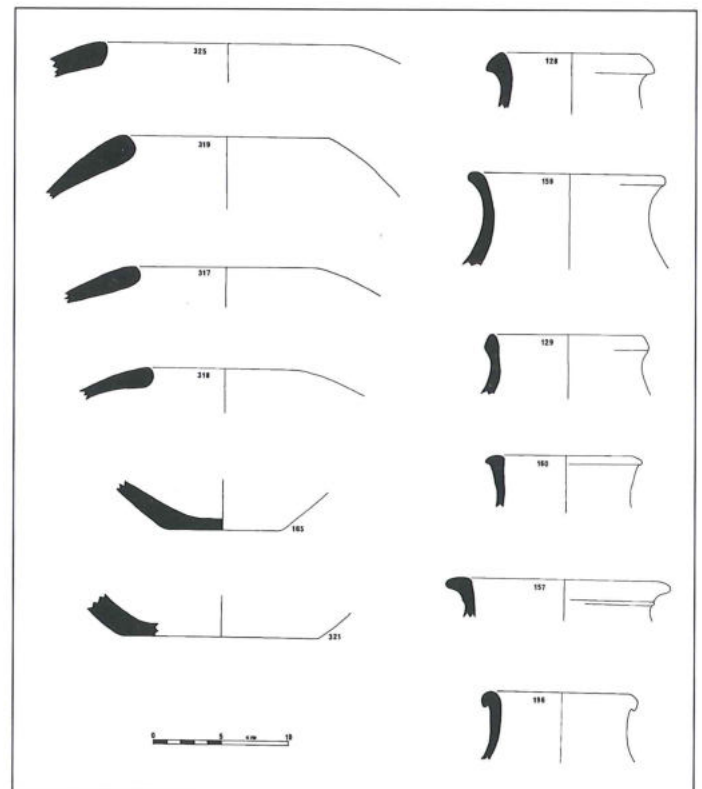
of the ceramic material excavated comes from Area 1 and the excavation of Silo 1, yet the total amount of material from the structures in Areas 2 and 3 combined, is slightly greater.

The majority of forms were undecorated, with most of the decorated wares having a reddish brown slip on the exterior of the vessel. Few vessels were burnished, or elaborately painted. Brown ware was the most common ware in use at Rukeis (see FIG. 12), while both Cooking Pot ware and Red ware also occur frequently. Brown ware is a medium fired brown coloured fabric with no distinct variation in the colour of the core, (although occasionally with a very faint light grey core), with up to 10% inclusions of very fine chert, basalt and lime. Brown ware is most commonly used on storage vessels, along with other wares such as Cooking Pot ware. Red ware is a medium fired red coloured ware with no distinct variation in core colour and up to 7-10% inclusions of very fine lime and basalt. Variants of Cooking Pot ware are relatively frequent, whilst fine and decorated wares are comparatively infrequent. In general, the variety of wares is not great, and the use of both ground basalt and lime as an inclusion is a common characteristic of many of the wares. Nearly half of the ceramic sherds recovered were medium fired, whilst more than another quarter were low fired.

In Area 5, the ceramic material recovered from the lowest levels, up against the city wall, may be dated to the Early Bronze Age. Early Bronze Age forms recovered



7. 190, 152 - Incised ledge handle fragments; 161, 186, 184 - Storage jars; 188 - Cooking pot; 764, 126, 167, 127, 168 - Bases; 158, 357 - Bowls.



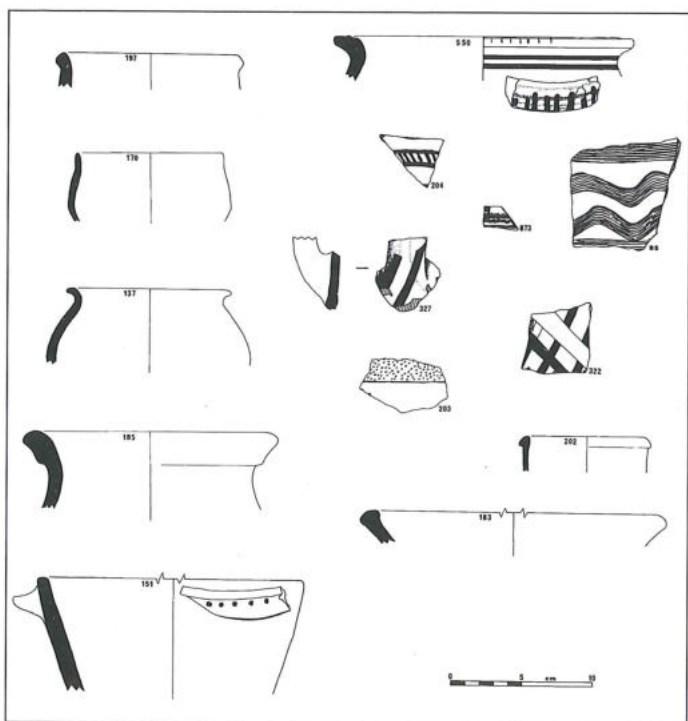
8. 325, 319, 317, 318 - Holemouth jars; 165, 321 - Flat bases; 128, 159, 129, 160, 157, 196 - Tall narrow-necked jars.

include holemouth jars (FIG. 8:325, 319, 317 and 318), and body sherds with band-slipped patterning (FIG. 9:322, 327). Other significant ceramic finds include two rim sherds and one body sherd of “Chocolate-on-White” ware (FIG. 9:550, 873 and 204), one “Tell el-Yehudiyeh” body sherd (FIG. 9:203) and several body sherds with bands of horizontal and wavy combed incised decoration, all of which are datable to the Middle Bronze Age (FIG. 9:BS).

Preliminary examination of the ceramic material from Braemer’s survey and excavation in the Ḥawrān suggests that the common wares found at Rukeis are not found in significant numbers at sites such as Khirbat al-Umbachi in the north-east Ḥawrān.¹ There is also much more variety in wares at Khirbat al-Umbachi. By contrast, in the ceramic material from Braemer’s survey to the west of Jabal ad-Drūz, there are many parallels with the material from Rukeis in terms of form/function of the vessels found, and the wares used in their production.

The majority of ground stone finds from the 1994 excavation season at Rukeis are fragments of basalt grinders. Other ground stone artefacts, all of basalt, include several fragments of bowls, footed bases from larger storage vessels, pounders, mortars, pestles, saddle querns and rubbing stones. A complete basalt mortar was found *in situ* in Area 2.

Most of the special finds from the 1994 excavation season at Rukeis have come from Silo 1. These include



9. 197, 183-Storage bowls; 170, 137, 202-Fine Jars; 185-Storage jar; 151-Storage bowl with incised handle; 550, 204, 873 - “Chocolate-on-White” ware; 327, 322 - Band-slipped patterning; BS - Combed incised decoration.

fragments of two ceramic spindle whorls, a broken painted clay figurine showing the head of a woman, a section of a marble bowl, a pierced clay disc, two shell beads, an ostrakon with an Aramaic inscription, a bone spatula and a burnt fragment of decorative bone inlay. A second pierced clay disc was recovered from Area 3, together with a piece of pierced basalt. Preliminary analysis of the letter forms and text of the ostrakon suggests a ninth century date (Mendenhall, pers. comm.). According to Mendenhall the inscription translates to “grain belonging to s[]” and is one of the earliest Aramaic inscriptions known thus far. The date of the inscription is confirmed by Lenzen who identifies the sherd as coming from a ninth century storage jar of medium size (Lenzen, pers. comm.). The figurine fragment, the head of a woman in Egyptian/Phoenician style, may represent the goddess Astarte, and could date to the same period as the ostrakon (cf. Vance 1994: 118; Yadin 1975: 180). While the majority of the ceramics found in Silo 1 date to the Middle Bronze Age, the ostrakon and figurine fragment suggest the silo was in use and probably filled in no earlier than the Iron Age and possibly later.

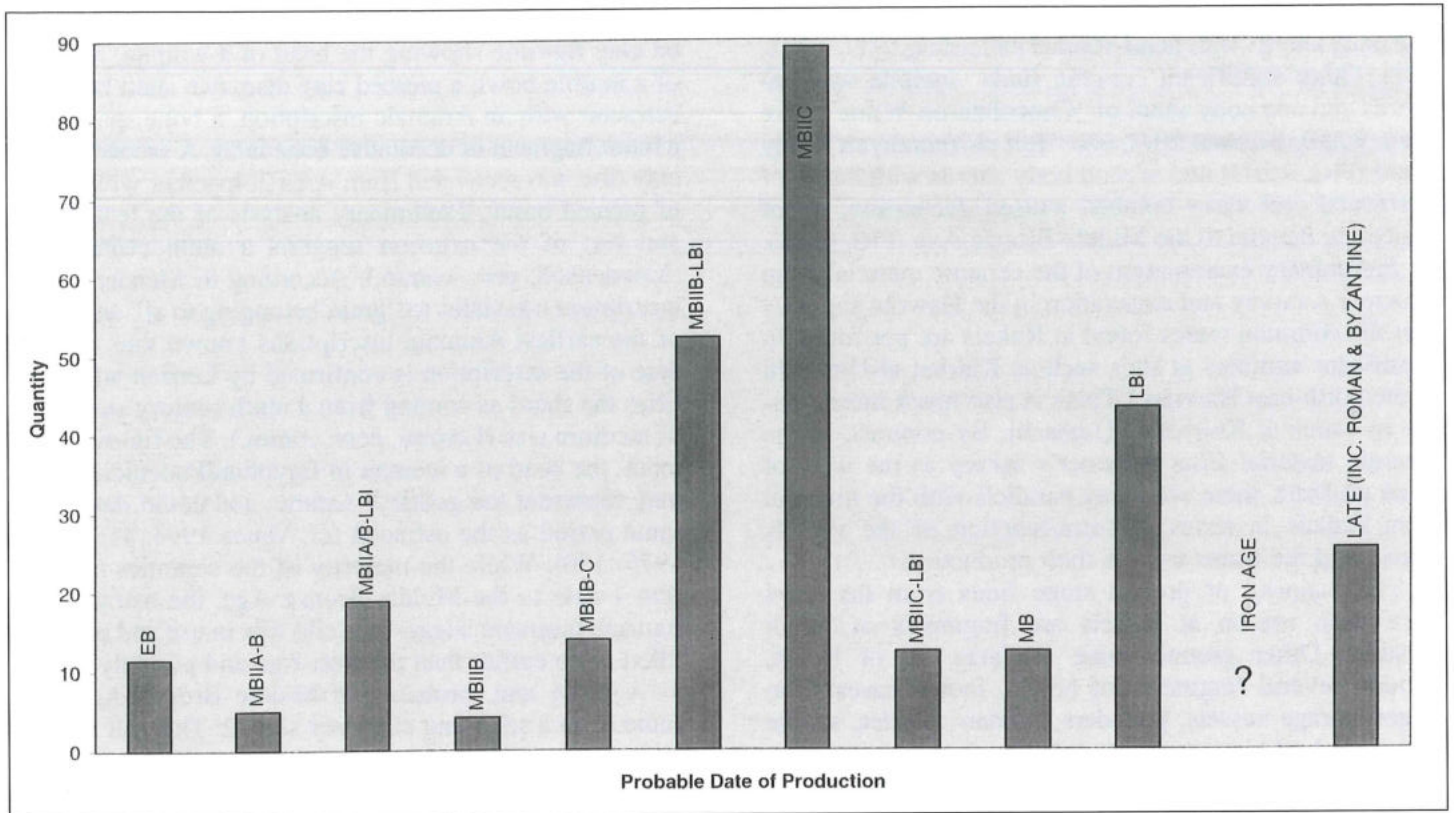
A stone seal, probably of Middle Bronze Age date, came from a sounding at survey site 42. The seal features a crescent enclosing four dots. Above this is a design resembling a quarter rosette. Middle Bronze Age stamp seals, mostly of faience, have been found at a number of sites in the Levant and Anatolia (cf. Keel *et al.* 1989: 47, Nos 12 [Alisharhüyük], 13 [Acemhüyük], 15 [Gordion]; 53, No 28 [Beth Shemesh]). The same designs occur on scarabs, and a motif with crescent and rosette similar to that of the Wādī al-‘Ājib seal appears fairly frequently (cf. Keel *et al.* 1989: 51, No. 22 [Gezer]; 23 [unknown provenance, purchased in Jerusalem]). Keel *et al.* suggest that the motif represents the sun and the sickle moon, a motif which occurs on Akkadian, Old Babylonian and Anatolian seals (1989: 78-80).

Middle Bronze Age Settlements in the Wādī al-‘Ājib

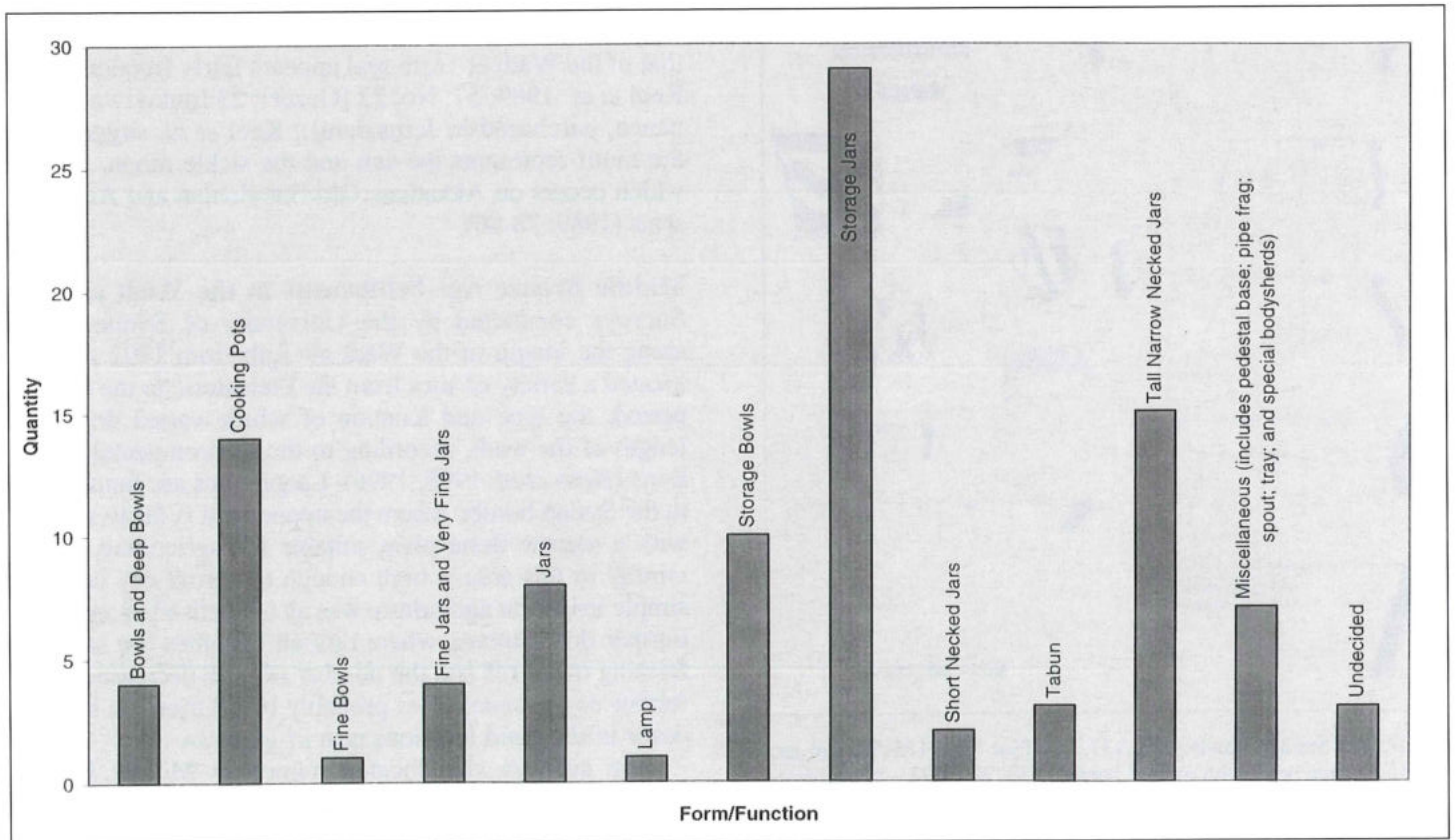
Surveys conducted by the University of Sydney team along the length of the Wādī al-‘Ājib from 1992 to 1994 located a variety of sites from the Prehistoric to the Islamic period, the type and location of which varied down the length of the wādī, according to the environmental conditions (Betts *et al.* 1995, 1996). Larger sites are found close to the Syrian border, where the upper wādī is fairly shallow with a narrow flood plain suitable for agriculture. While rainfall in this area is high enough to permit dry farming, simple irrigation agriculture was also practised in antiquity. Further downstream, where rainfall becomes too low, dry farming drops off and the number of sites decreases. Even further downstream, sites probably based more on herding occur in sheltered locations near *al-ghudrān*.

The surveys also located numerous Middle Bronze Age sites along the banks of the Wādī al-‘Ājib stretching from south of the Syrian border north-east of Rukeis to

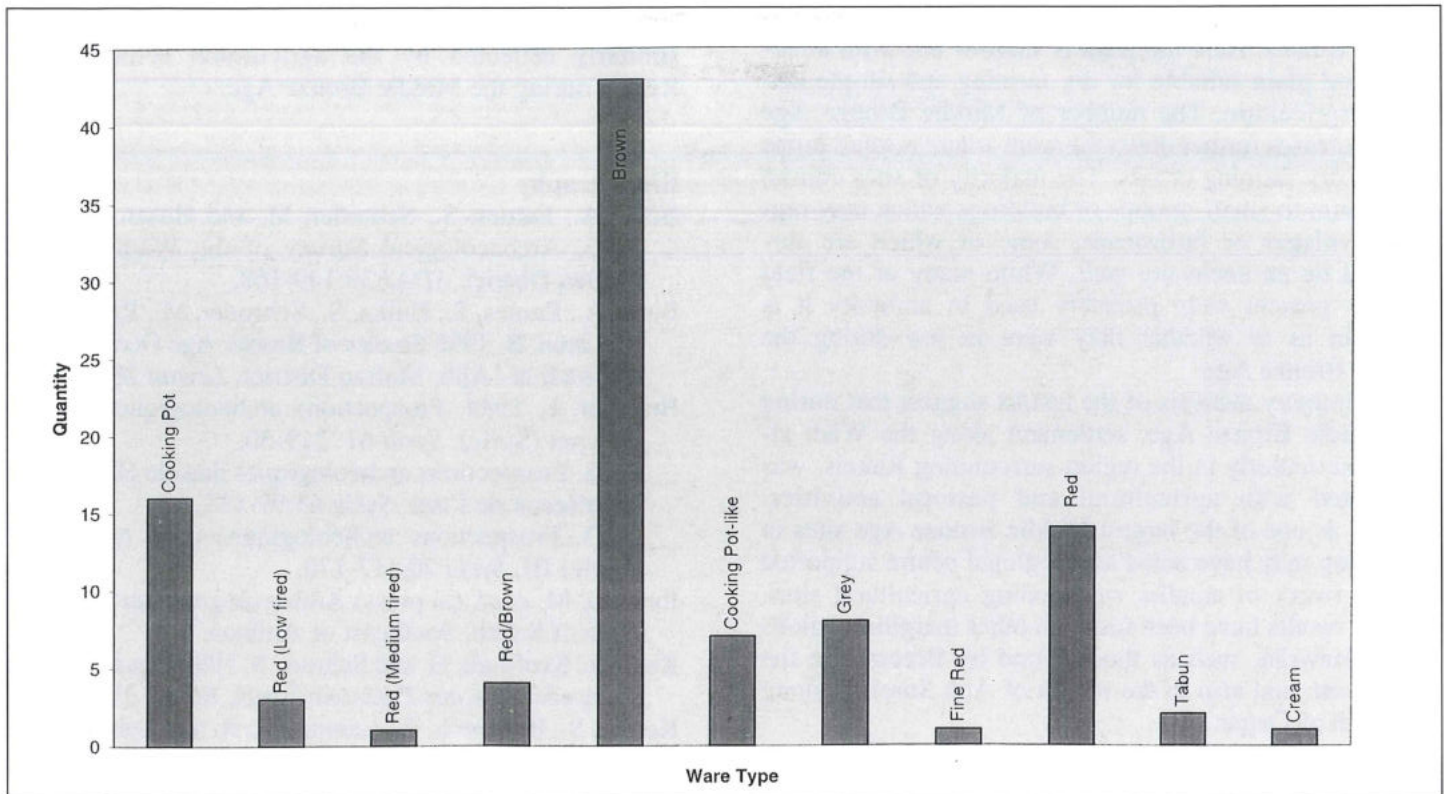
¹ M. Schroder would like to thank Frank Braemer and Cristoph Nicolle for kindly allowing her to examine their Ḥawrān survey material housed in the as-Suwaydā’ Museum.



10. Quantity of diagnostics according to probable date of production, Rukeis, (excluding those yet to be dated).



11. Quantity of diagnostics according to form/function, Rukeis (excluding the non-applicable).



12. Quantity of diagnostics according to ware type, Rukeis (excluding the non-applicable).

beyond Şabḥa in the south-west (FIG.13). The majority of Middle Bronze Age sites are concentrated along the upper wadi, particularly around the site of Rukeis. They consist mainly of small villages and hamlets as well as some larger villages and small tall sites, some of which are surrounded by an enclosure wall. Further south are a number of smaller Middle Bronze Age walled farmsteads with field systems probably sustained by canal irrigation.

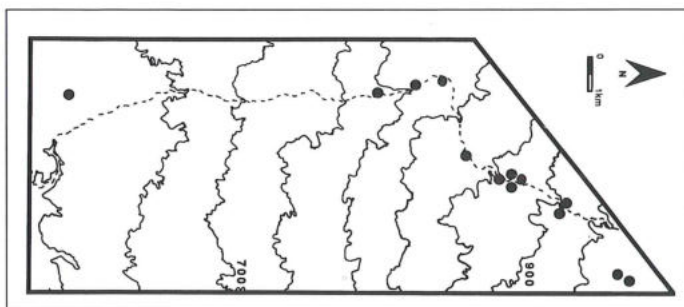
Preliminary analysis of Middle Bronze Age settlements along the Wādī al-‘Ājib indicates a pattern similar to that observed by Braemer around the site of Tall Debbeh in the north-west region of the Jabal ad-Drūz (Braemer 1984, 1988 and 1993). In this region Braemer has identified a centralised organisation of villages and peripheral sites of an agricultural nature connected by canals which surround and support the fortified capital of

Tall Debbeh (Braemer 1993: 160). Similarly, the pattern of settlement so far identified along the Wādī al-‘Ājib indicates that the site of Rukeis may have acted as a local centre surrounded and supported by a series of small agricultural sites.

A survey carried out during the excavation season at Abū Snaslah along the Wādī al-Qaṭṭār produced similar results to those along the Wādī al-‘Ājib. The region in which the Wādī al-Qaṭṭār is situated is similar to that of the Ḥawrān, in that it is a marginal zone where the nature of agricultural activities is determined by limited rainfall. While the Wādī al-Qaṭṭār survey located over 200 sites of varying types from the Palaeolithic to Islamic periods the period most represented was, along with the late Chalcolithic, the Middle Bronze Age (Lehmann *et al.* 1991: 59).

The results of excavations at Rukeis indicate that the main period of occupation at the site was during the Middle Bronze Age. While the extent of the Middle Bronze Age remains and the function of the site during this period are unclear, the evidence suggests that Rukeis was at this time enclosed by a simple yet massive stone wall within which existed a settlement of long rectangular basalt-built constructions with small internal rooms and divisions.

The survey of the Wādī al-‘Ājib suggests that, prior to the Roman/Byzantine period, the Middle Bronze Age was the most significant period of activity in this region of the Ḥawrān. The majority of Middle Bronze Age sites were



13. Detailed map of the Wādī al-‘Ājib showing the location of Middle Bronze Age sites identified during the 1992 and 1993 surveys.

located along the upper wadi and in the immediate environs of Rukeis. Here the wadi is shallow and with a narrow flood plain suitable for dry farming and simple irrigation agriculture. The number of Middle Bronze Age sites decreases further down the wadi where rainfall drops off and dry farming ceases. The majority of sites consist of medium to small groups of buildings which may represent villages or farmsteads, some of which are surrounded by an enclosure wall. While many of the field systems present were probably used in antiquity it is uncertain as to whether they were in use during the Middle Bronze Age.

Preliminary analysis of the results suggest that during the Middle Bronze Age, settlement along the Wādī al-‘Ājib, particularly in the region surrounding Rukeis, was associated with agricultural and pastoral activities. Rukeis, as one of the largest Middle Bronze Age sites in the region may have acted as a regional centre supported by a network of smaller surrounding agricultural sites. Similar results have been found in other marginal regions of the Ḥawrān, such as those found by Braemer in the north-west, and also in the region of Abū Snaslah, along the Wādī al-Qaṭṭār.

The hypothesis that during the Middle Bronze Age Rukeis was the centre of a region participating in agricultural activities is partially confirmed by the ostrakon found in Silo 1. The Aramaic inscription suggests that the vessel, identified as a storage jar, held grain and that the stone-lined silo in which it was found may have been a grain storage facility. While no occupational evidence has been found as yet, the ninth century date of both the sherd and the inscription indicates that during the Iron Age Rukeis was an important agricultural settlement and may have acted as the region's central storehouse of local agricultural products. The discovery of the ostrakon at Rukeis also suggests that during the Iron Age the southern

Ḥawrān was a significant region of agricultural activity, similarly reflected by the agricultural settlement of Rukeis during the Middle Bronze Age.

Bibliography

- Betts, A., Eames, S., Schroder, M. and Husan, A. al-Q. 1995. Archaeological Survey of the Wādī al-‘Ājib, Mafraq District. *ADAJ* 39:149-168.
- Betts, A., Eames, S., Hulka, S., Schroder, M., Rust, J. and McLaren, B. 1996. Studies of Bronze Age Occupation in the wadi al-‘Ājib, Mafraq District. *Levant* 28:27-39.
- Braemer, F. 1984. Prospections archéologiques dans le Hawran (Syrie). *Syria* 61: 219-50.
- 1988. Prospections archéologiques dans le Hawran. II: les réseaux de l'eau. *Syria* 65:99-137.
- 1993. Prospections archéologiques dans le Hawran (Syrie) III. *Syria* 70:117-170.
- Ibrahim, M. *et al.* (in press) Archaeological Survey in the Area of Sahab, Southeast of Amman.
- Keel, O., Keel-Leu, H. and Schroer, S. 1989. *Studien zu den Stempelsiegeln aus Palästina/Israel, Bd. II.* Freiburg.
- Kerner, S., Bernbeck, R., Lamprichs, R. and Lehmann, G. 1992. Excavations in Abu Snesleh: Middle Bronze Age and Chalcolithic Architecture in Central Jordan. Pp.34-54 in S. Kerner (ed.), *The Near East in Antiquity*, vol. III. Amman: Al Kutba.
- Lehmann, G., Lamprichs, R., Kerner, S. and Bernbeck, R. 1991. The 1990 Excavations at Abu Snesleh: Preliminary Report. *ADAJ* 35: 41-62.
- Vance, D. 1994. Literary Sources for the History of Palestine and Syria: The Phoenician Inscriptions, Part Two. *BA* 57/2: 110-120.
- Yadin, Y. 1975. *Hazor: The Rediscovery of a Great Citadel of the Bible.* Jerusalem: Weidenfeld and Nicolson.