

# THE GREAT ARAB REVOLT PROJECT

## 2008 AND 2009 FIELD SEASONS

*Neil Faulkner, Nicholas J. Saunders and John Winterburn*

### **Introduction**

The Great Arab Revolt Project (GARP) (**Fig. 1**) is planned as a ten-year project to investigate the history and archaeology of the Great Arab Revolt (1916-1918). A general introduction to the project, its organisation and methods appears in our report on the 2006 and 2007 field seasons, published in *ADAJ* 52.

The main focus of our first two field seasons was (a) the late Ottoman trench-fortress around Ma'ān and (b) the late Ottoman defences in and around Wādī Rutm station, which lies approximately 60 km south of Ma'ān on the Ḥijaz railway.

This report details work on two further sites investigated in detail in 2008 and 2009: (a) the late Ottoman defences in and around Baṭn al-Ghūl station, approximately 55 km south of Ma'ān on the Ḥijaz railway, and (b) the late Ottoman redoubts and Hashemite tribal army base at al-Wuhayda, approximately 15 km west-south-west of Ma'ān on the 'Aqaba road.

The academic directors of the project are Neil Faulkner and Nick Saunders (both Bristol University). They are supported by a field team comprising the following: David Thorpe (field director), Hani Falahat (Department of Antiquities), Zeyad al-Salameen (al-Hussein bin Talal University), Mansour Shqiarat (al-Hussein bin Talal University), Susan Daniels (project administrator and planner), Ali Baldry (photographer), Cat Edwards (site supervisor), Jules Evan-Hart (metal-detectorist and finds specialist), Anna Gow (finds assistant), Martin Plumer (metal-detectorist), David Spencer (site supervisor), Roger Ward (metal-detectorist and IT specialist) and John Winterburn (landscape archaeologist).

The 2008 field season ran from 12 to 26 No-

vember and involved 29 British fieldworkers and three Jordanian. The 2009 field season ran from 17 November to 1 December and involved 32 British fieldworkers and three Jordanian. This report covers both seasons, just as our previous report covered both 2006 and 2007.

### **Fieldwork Methods**

Work takes place at four distinct but overlapping levels:

#### *Level 1*

Archive research to locate military sites within the southern Jordan study area.

#### *Level 2*

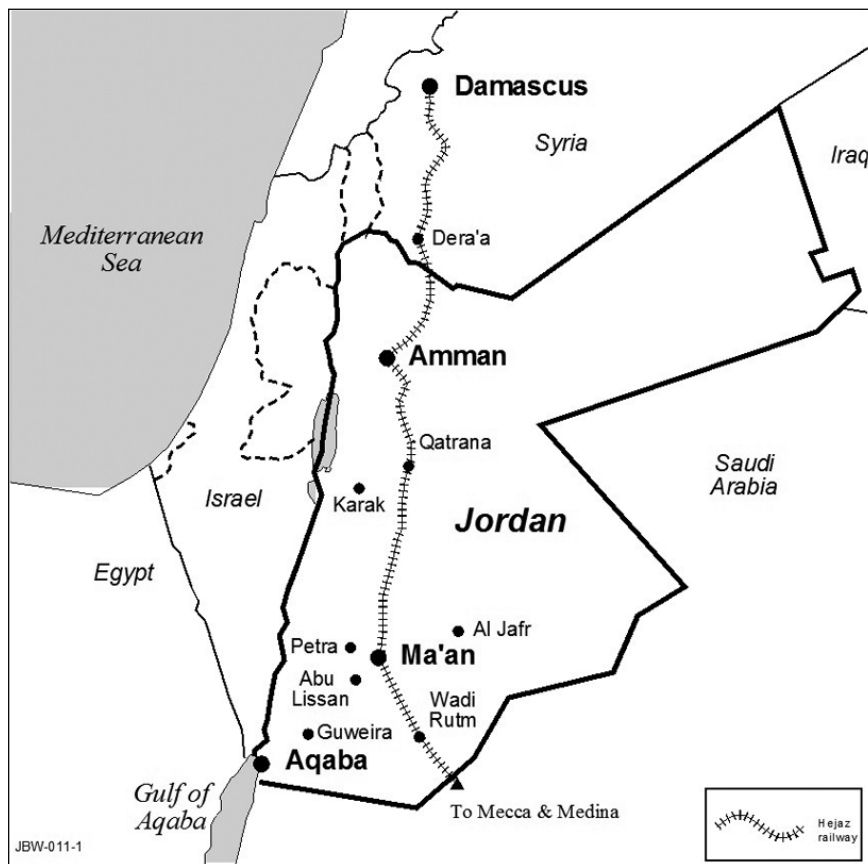
Field reconnaissance in vehicles and on foot and GPS-based surveying to identify and plot sites and features within specific militarised landscapes identified at Level 1. In 2009, we completed a comprehensive survey of all late Ottoman military sites on the Ḥijaz railway between Ma'ān and Wādī Rutm stations (to be discussed in detail in a future report).

#### *Level 3*

Metal-detector and measured ground surveys to map and characterise (a) groups of features forming coherent sites and (b) spreads of diagnostic artefacts within the specific militarised landscapes surveyed at Level 2. In 2008 and 2009, we carried out Level 3 investigations at Baṭn al-Ghūl, 'Aqabat-Ḥijaz, Makins' Fort and Wuhayda.

#### *Level 4*

Surface clearance, excavation, standing building survey, detailed recording and system-



1. Map showing sites investigated by GARP. Baṭn al-Ghūl and 'Aqabat-Hijāz are just north of Wādī Rutm, while al-Wuhayda is between Ma'ān and Abū Lisān.

atic artefact recovery to characterise and phase typical and / or significant features within the areas surveyed at Level 3. In 2008 and 2009, we carried out Level 4 investigations of selected features at Baṭn al-Ghūl, Aqabat-Ḥijāz, Makin's Fort and Al-Wuhayda (work on Aqabat-Ḥijāz and Makin's Fort will be discussed in detail in a future report on the wider Ḥijāz railway survey.)

**Baṭn al-Ghūl: A Defended Station and Escarpment on the Ḥijāz Railway**

Baṭn al-Ghūl station (Fig. 2) lay approximately 55 km south of Ma'ān, between Aqabat-Ḥijāz station 4 km to the north and Wādī Rutm station 6 km to the south. The particular significance of the site is that at this point the railway negotiates the difficult descent down the Baṭn al-Ghūl escarpment, which separates the limestone and basalt plateau to the north from the sand desert represented by Baṭn al-Ghūl and Wādī Rutm to the south. The descent involves a wide double loop in the line.

This point had great strategic significance in 1916-1918. Curving rails were much harder to

replace than straight ones, so damage to the line here was more effective than elsewhere. The top of the escarpment commands extensive views across the plateau to the north and west, extensive views down the wadis to the south and fair views to the east. It is therefore a key position for observation of the line and for command and control.

Our investigations have identified a number of distinct sites that appear to form an integrated complex of defence, logistics and accommodation.

*Baṭn al-Ghūl Station*

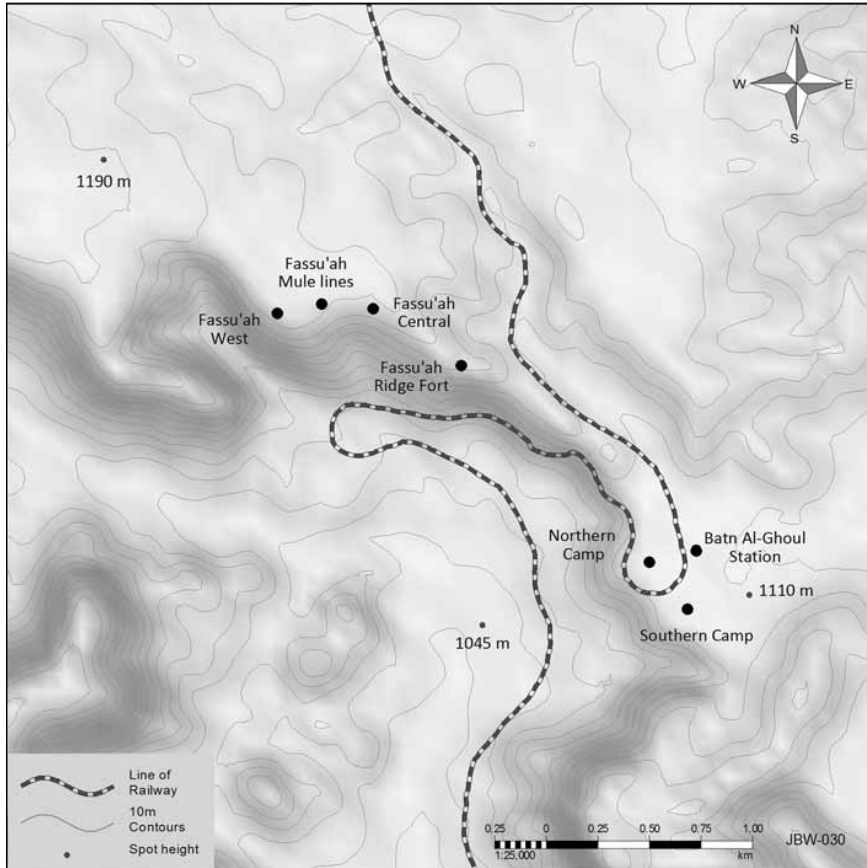
This station appears to have comprised only one building. It has been comprehensively levelled, probably when the line was re-laid in relatively recent times as an industrial railway, with only one wall part-standing amid heaps of bulldozed rubble. It is therefore impossible to determine the extent and form of any improvised defences at the station.

*The Northern Camp*

This is a late Ottoman tent-ring encampment

located inside the loop of the Ḥijāz railway as it begins the descent of the Baṭn al-Ghūl escarpment close to Baṭn al-Ghūl station. It comprises 17 tents, mainly circular, but some sub-rectangular. A number of these rings were excavated (**Fig. 3**) and all spoil sieved to recover complete

finds assemblages. The entire site was also comprehensively metal-detected. Finds were numerous, varied and well-preserved, including paper, cardboard, canvas, wood, uniform fragments and organic ecofacts, though identification of the site as late Ottoman depended, as usual, on



2. Map showing related late Ottoman military sites in the 'Aqabat-Hijāz / Baṭn al-Ghūl / Wādī Rutm area.



3. Late Ottoman tent-rings under excavation at Baṭn al-Ghūl.

diagnostic metalwork (**Fig. 4**). Detailed analysis of the finds assemblage is proceeding.

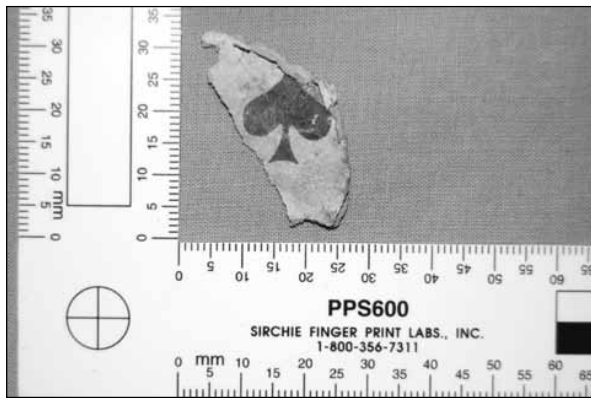
#### *The Southern Camp*

This is also a late Ottoman tent-ring encampment, but it is located outside the loop of the Hijāz railway. It comprises 16 tents, mainly circular, but some sub-rectangular. The layout of the tents was generally very regular, most of them forming an 'avenue' with a line of tents on either side of a wide central pathway. A number of these rings were excavated and all spoil sieved to recover complete finds assemblages. The entire site was also comprehensively metal-detected. Finds here were more sparse than in the northern camp. Detailed analysis of the finds assemblages, and comparison with those from the northern camp, may indicate different uses for the two sites. One possibility is that both

camps were originally construction camps used by workers (perhaps militarised labour battalions) during the construction of the Hijāz railway, with only the former, the northern camp, being re-used by soldiers during the war.

#### *Faşşū'ah Ridge Fort*

This fort (**Figs. 5 and 6**) was located on the Baṭn al-Ghūl escarpment approximately 1.4 km north-west of the ruined station. It comprised the following distinct elements: (a) a large central blockhouse with a loopholed outer wall, a central courtyard traversed by stone-lined pathways and various rooms opening onto this, (b) a small loopholed blockhouse and various breastwork-trenches forming an inner defended complex around two sides of the central blockhouse and (c) an outer perimeter wall comprising a breastwork-trench, several sentry-posts, a main



4. Part of a playing card. One of many finds from Baṭn al-Ghūl indicative of everyday life in the late Ottoman Army on the Arab front during 1917-1918.



6. An Ottoman sniper's view through a loophole in the wall of the small blockhouse. The outer perimeter wall can be seen in the middle ground.



5. General view of Faşşū'ah ridge fort from just inside the perimeter wall looking roughly north-west towards the large central blockhouse on the highest point.

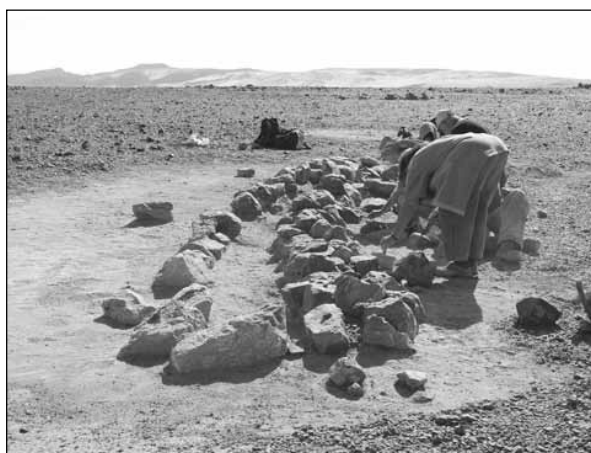
gateway and four secondary entrances (not all necessarily contemporary). Associated subsidiary features included a small square building in the middle of the enclosure, an extramural bread-oven and what may have been extramural latrines. It is possible that the fort may represent late Ottoman re-use of an earlier structure; it is certain that more than one phase of building is represented. The size and complexity of the fort, combined with its prominent and central location, argues for it being the command and control centre for the 'Aqabat-Ḥijāz / Baṭn al-Ghūl / Wādī Rutm sector.

#### *Faṣṣū'ah Central*

Approximately 525 m north-west of Faṣṣū'ah ridge fort on the Baṭn al-Ghūl escarpment, this group of features comprises two blockhouses, a possible machine-gun position facing north, observation posts facing south and various tent-rings.

#### *Faṣṣū'ah Mule Lines*

Approximately 250 m further west on the Baṭn al-Ghūl escarpment, this group of features comprises a large rectangular area of stone-clearance (possibly for tethering two lines of mules), a feeding trough (Fig. 7), other features of unknown purpose and various tent-rings. The character of the features and associated finds of mule-shoes have allowed identification of the site as an area for tethering, feeding and watering mules, perhaps used to carry water from 'Aqabat-Ḥijāz approximately 3.5 km to the north-east.



7. *The feeding trough at Faṣṣū'ah mule lines.*

#### *Faṣṣū'ah West*

Approximately 230 m further west again on the Baṭn al-Ghūl escarpment, this group of features comprised 17 tent-rings, two observation posts and a bread-oven.

#### **Al-Wuhayda: Late Ottoman Redoubts and Hashemite Arab Army Base**

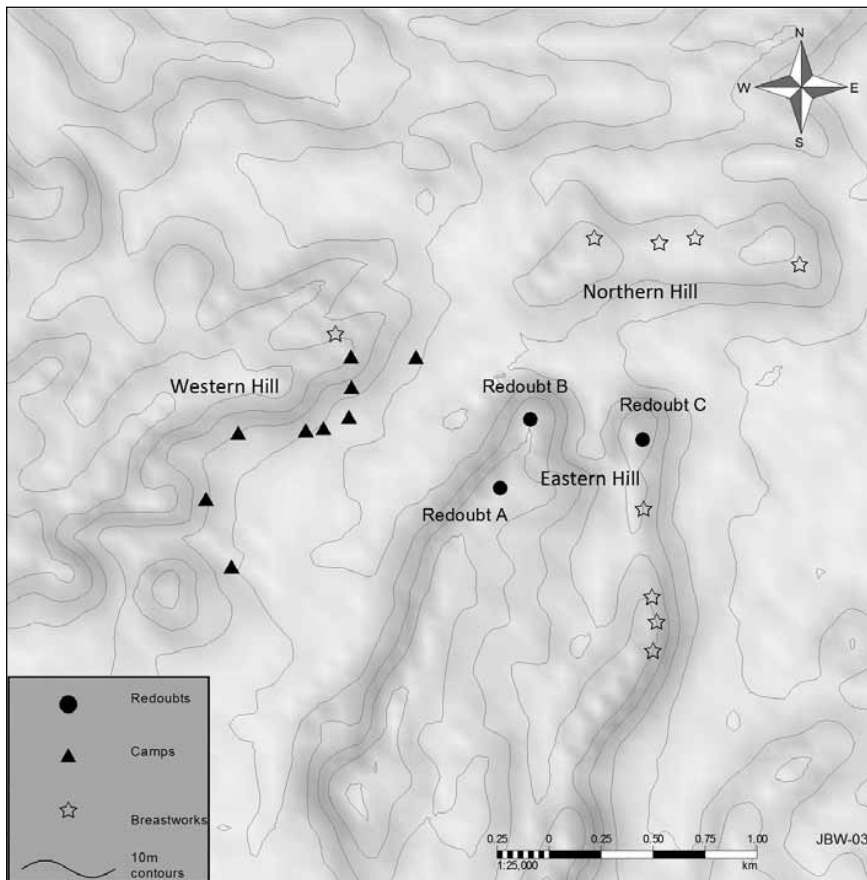
Al-Wuhayda (Fig. 8) lies approximately 15 km west-north-west of Ma'ān on the Aqaba road. The area was heavily fortified by the late Ottomans, presumably to cover the main approach from 'Aqaba to Ma'ān after the former's capture by Arab forces in July 1917. The position was captured by the Arabs in January 1918, and from then until September 1918 it served as one of the principal bases of Prince Feisal's Northern Army.

The site had been identified and located in desktop research by John Winterburn. Preliminary field reconnaissance then confirmed the archaeological potential of the site, and detailed field investigations began during the 2009 season. As well as three large late Ottoman hilltop redoubts and extensive late Ottoman hilltop breastwork-trenches, fieldwork revealed astonishing and wholly unexpected evidence for the Hashemite Arab military occupation, making al-Wuhayda site of the utmost importance.

The site is defined by three major ridges and two large wadis. We have called these the eastern hill, northern hill, and western hill, and the central wadi and northern wadi. Our investigations identified and recorded the following distinct elements:

#### *Redoubt A on the Eastern Hill*

One of three large redoubts at the northern end of the eastern hill at al-Wuhayda, redoubt A (Fig. 9) comprises the following elements: (a) an outer trench with firing bays and traverses on the western side only, (b) a breastwork-trench around the entire perimeter of the hilltop redoubt and (c) up to 13 small, square or sub-rectangular sunken-floored structures (Fig. 10), each part cut into rock, part built up with dry-stone walling, each containing a small hearth. Not all buildings are of the same size. The majority are ranged around the edge of the enclosure. One larger square building is located in the centre, and is interpreted as officers' accommodation and / or



8. Map showing late Ottoman and Hashemite Arab military sites at al-Wuhayda.



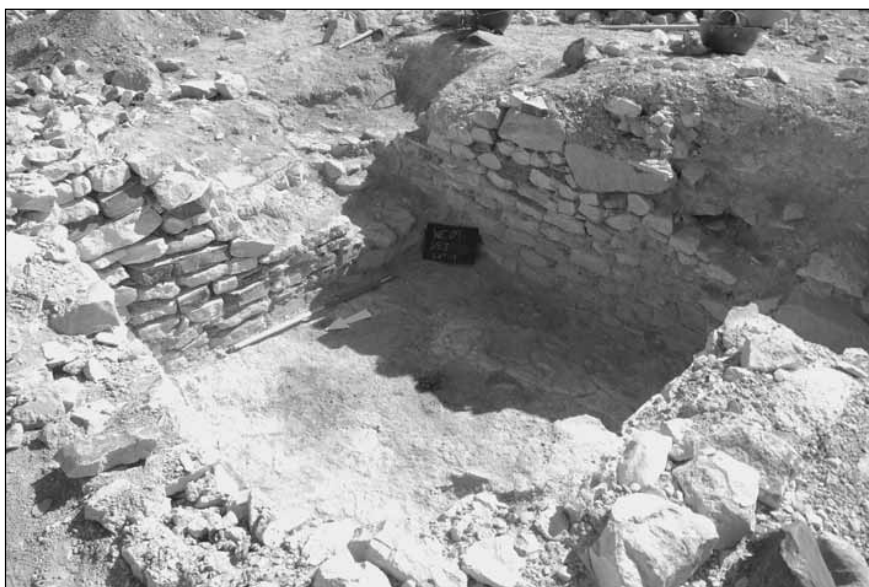
9. General view of redoubt A at al-Wuhayda looking west.

a command and control centre for the redoubt. Extensive damage to the site, apparently by industrial quarrying, leaves some details in doubt.

#### *Redoubt B on the Eastern Hill*

With redoubt A, redoubts B and C formed a triangular arrangement of mutually supporting

fire-bases at the northern end of the eastern hill. Neither B nor C could be explored in detail. B has been subject to severe damage; much of it is now effectively levelled. It appears to comprise a perimeter breastwork-trench and probably a roughly similar number, style and arrangement of interior buildings as redoubt A.



10. Detail view of one of the sunken-floored structures inside the perimeter at redoubt A.

#### *Redoubt C on the Eastern Hill*

Redoubt C has also been extensively damaged, but survives rather better than B. Though not explored in detail, it was possible to identify the following elements: (a) two lengths of exterior breastwork-trench, one to the south and one to the north-west, (b) a breastwork perimeter wall forming a complete oval-shaped enclosure, (c) numerous interior buildings, mostly built onto the inside of the perimeter wall, but including two substantial free-standing structures (perhaps pre-dating the main build), (d) an underground, rock-cut, two-chamber feature and (e) two main entrances guarded by sentry-posts. It is notable that each of the redoubts, though similar in size and clearly forming an integrated defensive complex, was slightly different in design. Different officers and NCOs presumably directed the work according to their own conceptions.

#### *Breastwork-Trenches on the Northern Hill*

This ridge appears to have functioned as an outwork for the main position represented by the redoubts on the eastern hill. At ten points around the circumference of the northern hill, which is relatively flat-topped, there are lengths of breastwork-trench, sometimes with associated blockhouses, plus occasional observation posts. There are also the ragged remains of tent-ring camps and stone-lined paths in places. Many, but not all, of the defensive positions are

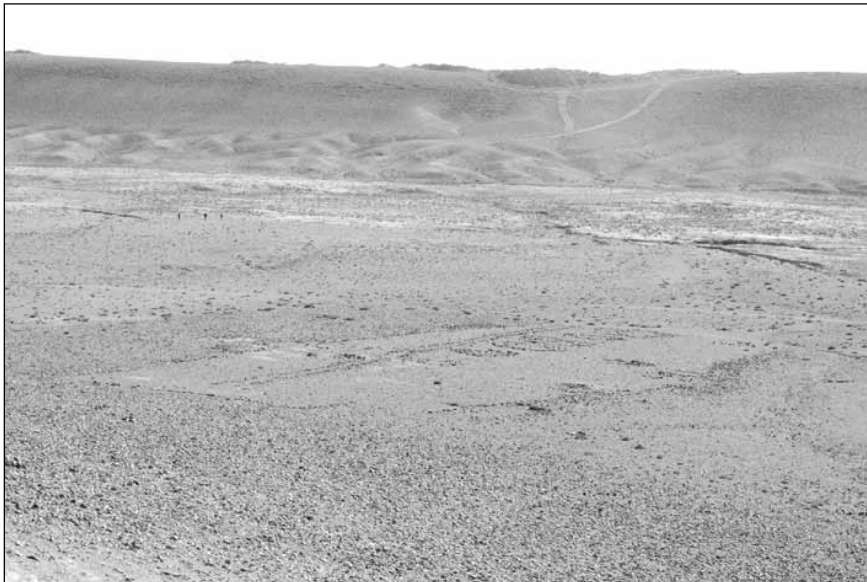
mutually supporting.

#### *Tribal Encampments in the Central Wadi and on the Western Hill*

On the slightly raised western side of the central wadi and on the northern and eastern slopes of the western hill, there is a series of ten complexes formed of stone alignments (which we have designated A-J) (**Figs. 11 and 12**). Each complex comprises various enclosures of irregular shape and size, smaller circular or rectangular 'rings' presumed to represent tents, stone-lined pathways and possible occasional stone cooking fires / hearths. While there is some evidence for regular tent-rings and careful alignment in places (perhaps representing Hashemite regulars using British Army tents), most of the complexes lack any degree of regularity in layout or standardisation of features. In addition, each complex appears to be separated from the others by what might be regarded as 'liminal' space. The entire series of complexes stretches along approximately 1.5 km of wadi; at its widest, towards the northern end of the western hill, it forms a belt about 200 m deep. Metal-detector survey has confirmed this site as the camping ground of an Anglo-Arab military force of First World War date. We are therefore confident that we have located the main base of Prince Feisal's Northern Army between April and September 1918. We believe this to be a unique discovery: the only archaeological imprint of an Arab tribal



11. General view of the central wadi at al-Wuhayda, showing the location of the Hashemite Arab army base in 1918.



12. View of one of the tribal encampments forming the Hashemite Arab army base at al-Wuhayda.

army ever found. This site is therefore of huge potential importance for Jordan's national identity, for heritage tourism and for conflict archaeology.

### Conclusions

In our first report, we concluded that the Great Arab Revolt Project had confirmed the huge potential of modern conflict archaeology in southern Jordan by revealing the survival in desert areas of an extensively militarised landscape dating from 1916-1918. We argued that the remains indicated a military response to a threat that was, on the one hand, dispersed and

low-intensity, but on the other, chronic and pervasive. We further argued that this contrasted sharply with the experience of the First World War on the better known Western Front.

Work during 2008 and 2009 has confirmed the intensity of the late Ottoman militarisation of the landscape. In particular, detailed work at Baṭn al-Ghūl has shown that the density of military remains earlier revealed at Wādī Rutm is not exceptional. Moreover, wider survey work (not reported in detail here) has confirmed that comparable densities exist along the entire stretch of Ḥijāz railway between Ma'ān and Wādī Rutm, and that other areas, such as the approaches



to Ma‘ān from ‘Aqaba, likewise bear a strong late Ottoman military imprint. The impression grows of a large-scale counter-insurgency operation in southern Jordan between July 1917 and October 1918 — testimony to the effectiveness of the Arab military effort.

The discovery of the Arab army base at al-Wuhayda has, however, introduced a whole new dimension to the project. The sharp contrast between the late Ottoman military imprint and that of the Hashemite Arab army underlines the extreme ‘asymmetry’ of the conflict. The difference between the hilltop redoubts, breastwork-trenches and regular tentage of the Ottoman Army and the sprawling tribal encampment of

the Arab irregulars in the base and sides of the wadi could hardly be more extreme.

GARP is therefore contributing substantial new information and ideas to at least three distinct archaeologies: that of modern conflict, that of southern Jordan and that of desert movement and warfare. It is also revealing the potential which exists for the development of major new heritage tourism attractions in the region.

Neil Faulkner,  
Nicholas J. Saunders  
John Winterburn  
Department of Archaeology and Anthropology  
University of Bristol