

**PRELIMINARY REPORT ON THE  
ARCHAEOLOGICAL SURVEY  
BETWEEN MA'AN AND 'AQABA**

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by

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The archaeological survey in the Aqaba-Ma'an area of the Hashemite Kingdom of Jordan was conducted over a period of some five weeks during January and February 1980 as part of a preliminary archaeological survey of Southern Jordan which was sponsored by a Sydney University Special Projects Research Grant. The purpose of this survey was to commence the exploration and study of those areas in Southern Jordan which are traditionally considered to form part of the ancient Biblical land of Midian (Medieval Arab Madyan). The permit for this work was granted by the Jordan Ministry of Tourism and Antiquities, and special thanks must be expressed to Dr. Adnan Hadidi, Director of the Department of Antiquities and Tourism for his most considerate assistance in facilitating this research project. The representative of the Department of Antiquities, Mr. Sami Rabadi, was in no small way responsible for the success of this survey, and due recognition and appreciation must also be expressed to him.

The stimulation for this project is due to the research and advice of the Director of the British Institute of Archaeology and History in Amman, Mrs. C.-M. Bennett, O.B.E. Mrs Bennett's long standing interest in, and detailed knowledge of, the archaeology and history of Southern Jordan along with her especial kindness in making available the facilities and Land Rover of the British Institute of History and

Archaeology made possible the realisation of this project. Gratitude must also be expressed to Mr. Michael Macdonald for his advice and encouragement. His knowledge of these areas and his warm support and cooperation in the planning and execution of this project are greatly appreciated.

The survey, which was conducted over a period of twenty-one days, was concerned with the area extending from the coast of the Red Sea north to the Hisma area (Pl. XXVI, 1). This is the first stage of a longterm project concerned with understanding the nature of the settlement and development of urban civilization in Southern Jordan and its relationship to other areas in Southern Palestine, Northern Sinai and the North West Hejaz.

It is important to emphasize that the report makes no claim to be exhaustive. Rather this report reflects the general significance of the area and the epigraphic and non-epigraphic archaeological material which, at this stage, it appears to contain.

The stimulus for this research is the changing understanding of the nature of the settlement and the development of urban civilization in these areas (Parr *et al.* 1968: 194, Beit-Arieh, 1978: 11).

The southern end of the Ma'an district was traditionally considered to be a significant

part of the biblical land of Midian. This tradition appears to have been sustained by the toponymy and general nomenclature of the Medieval Arab geographers, and as late as the nineteenth century was the stimulus for considerable scholarly interest and exploration (Burton 1878:175).

An important focus of interest in this survey is the nature of these traditions and the Midianite association with these areas. In particular the vexed question of the character of Midianite society and the nature of its relationship to other ancient peoples such as the Edomites, Amalekites, Kenites and the later Nabataeans, is of considerable concern. In the light of excavations at Timna on the southern side of the Wadi Araba, Tell el Kuleifah in the southern end of the Wadi Araba, and surveys concerned with the Wadi Sirhan, the characteristics of the societies of these peoples stand in need of reassessment (Adams 1977:36). In this regard the present survey found sherd evidence at Um Guwe'ah in the Sel Rumman area of Wadi Rumman which suggests the possibility of a Midianite presence in this area.

The geographical nature of the Hisma area is such that to some extent it would seem to inhibit freedom of movement (Pl. XXVI, 2). This stands in contrast to the tableland to the north where good grazing and wide open spaces seem to have been characteristics which facilitated human utilization of natural resources. So too the Wadi Araba further to the west facilitated travel and had important mineral resources which were significant factors in the settlement and development of the area. The Hisma area has traditionally been associated with a more nomadic way of life, although good supplies of water from springs such as those at

the foot of Jebel Ram, and Jebel 'Ishrin seem to have been important centres of occupation from quite early periods (Harding 1952:6).

Traditions about this Hisma area indicate that it was the northern end of the way to Sheba whence came not only the legendary Queen of Sheba to consult with King Solomon, but also the spice and frankincense trade (1 Kings 10:1-5, Exodus 30:34, Isaiah 60:4, 6-7). While it is clear that both overland caravan trade and the herding and pasturing of flocks were part of the human activity in this area such participation in the regional economy of the area probably reflects only one part (and that traditionally the most well known) of the human activity in this area. Other evidence suggests links with maritime trade as well as mining and metallurgy and a more sedentary occupation of the area from time to time.

Thus while the geography of the area as it extends south into Saudi Arabia forced the caravan trade to follow an inland route, there are also along the coast of the Red Sea south of Aqaba small bays which ultimately connect with the inland trade routes. Further south principal anchorages at Haql and Maqna were known to have trade contacts with the hinterland. During this survey an initial exploration was made of the immediate off-shore marine archaeology potential of the area between Aqaba and the Saudi Arabian border. While time and facilities limited this aspect of the general survey it would seem that a future survey of this area is important, especially with regard to the nature of the occupation and use of the small bays along the coast. (A more extensive archaeological survey of this coastal area and a more intensive exploration of the immediate hinterland up to the mountains will

be necessary.) During the present survey small middens of shells were found on the hills close to the bays. A similar concentration of shells was found further north in the Wadi Yutum at Khirbet el Khalidi.

Earlier explorers also reported what appears to have been evidence of early mining activities and extensive settlements further south in Saudi Arabia. (Burton 1878:251) This metallurgical activity may have extended along the coast and in the hinterland and may be linked with Timna and other early mining projects in the Sinai area. Good conditions for

travel by sea, as well as by land, facilitated this activity in later periods and there seems reason to argue that small coastal settlements in the bays made living and travel along the coast a distinct possibility.

This year the survey was mainly concerned with the Wadi Rum complex extending west to Wadi Yutum, east to Wadi Qureina and south to the Saudi Arabian border. Of this complex the Wadi Rum has been explored to some considerable extent and the Wadi Yutum, along which the highway and the railroad pass, has been disturbed by these communications projects. Therefore the following sites were explored:

Wadi Yutum

Khirbet el Khalidi

Wadi Rum

Risqeh  
Ain el Qattar  
Khaz 'ali  
Jebel es-Sad  
Abu Ain Kheli  
Um Kheiret  
Makman el Jahali

Khor el 'Ajram

Hidheb el Fala

Wadi Sabit

Abu Hamet

Wadi Marsad

Jebel Shamrah  
Um Kheret el Marsad  
Jebel Ettaqtaqiya

Hisma

Um Seleb  
Um Ghadha  
Um Ahada

Wadi Ishrin

Um Uqser

Wadi Dhiqa

Dhega

Wadi Rumman

Sad el Romi  
Um Masak Ibn Saari  
Rakbat Um Edgeyer  
Masit Um Hasa  
Um el Usban  
Gleb Rumman  
Rewes el Khel  
Wadi Tegebat  
Wadi Eleligat  
Um Guwe'ah  
Jebel Asalah  
Jebel Abu Sagar  
Jebel Utud

This complex Wadi system, and in particular these sites, have produced a wide range of both non-epigraphic and epigraphic evidence which will take some time to thoroughly analyse and consider. However, for this interim report attention is drawn to the following aspects of the evidence:

### **The Stone Circles**

Stone circles varying from about 20 to 150 metres in diameter were found throughout the area. These circles, the likes of which have been identified in other areas of Jordan, South Palestine, the Sinai and North West Arabia, were associated with flints in some instances and in others flint evidence was lacking altogether (Pl. XXVII,1). While in some cases the walls of the stone circles would appear to have been built of stones which had been worked, frequently this was not the case. In some few cases there would appear to have been an entrance, but in many cases an entrance was not evident. In some instances small stone cairns were situated close to the larger stone circles and in a few cases such cairns were actually built into the stone walls (Pl. XXVII, 2). It may be that excavation of these stone cairns will reveal that they cover cist graves as is the case in the north of the Wadi Araba at Bab edh-Dhra'h (Clark 1979:69). Meanwhile attention is drawn to the excavation at Risqeh by Diana Kirkebride (Kirkebride 1969). The Risqeh excavation in the south of Wadi Rum showed that a stone cairn there was composed of tall thin slabs of stone worked into schematic human forms. According to Miss Kirkebride's excavation at Risqeh, while the site was destroyed before the beginning of the Christian era, it could have been built at anytime between then and the 5th millennium B.C.

While it is too early to draw definite conclusions about the origin and purpose of these stone circles in this particular area, the spread of this phenomenon throughout the areas under study suggests that they reflect a widely used technique indicative of a regional economy which included a sizeable pastoral element.

### **Rock Carvings**

An important and fascinating characteristic of the general area under survey was the large number of rock carvings which seem to be similar to those known from other areas in Jordan, Southern Palestine, the Sinai and Saudi Arabia. These rock carvings usually occur in clusters and were sometimes associated with Thamudic inscriptions (Pl. XXVIII,1 XXVIII,2 XXIX,1). Frequently they seemed to occur on large stone faces and the patina of the carvings suggests that such sites have been the places of such artistic expression over long periods of time. Many engravings had a patina which was very weathered and dark brown. Such collections at particular sites appear to reflect certain stylistic differences as well as different subject matter. This sort of evidence, when studied at much greater depth, may well elucidate the economic interests and activities of various generations of inhabitants of these areas and also shed light on their general cultural patterns and perceptions.

### **Flints**

Flints were an important part of the survey's findings. (Pl. XXX, 2). The production of such tools is an important guide to the economic and domestic activities of the inhabitants of these areas. While further intensive study needs to be devoted to the flint industries of Southern

Jordan and North West Arabia, with special regard for typology and chronology, it would seem that it may be possible to argue that these southern areas of Jordan had an extensive lithic technology which appears to be parallel to late Neolithic and Chalcolithic flint industries elsewhere in Jordan. However attention is drawn to the behavioural significance of this lithic evidence in that, occurring so frequently in an apparently Chalcolithic ceramic context in these dryer areas, they may be some indication of the tools used to cut and prepare the tough fibrous plants of this area (Shafer & Holloway 1979:398). Further study needs to be devoted to the sources and techniques of stone tool production with a special focus on the place of such lithic material in the general economy, especially with regard to possible trade associations as well as to how production patterns may have varied from time to time. It is suggested that at least for earlier periods in the history of this area the flint-industry is probably an important factor in the definition of its regional economy.

### **Hidheb el Fala**

A large Chalcolithic site was discovered at Hidheb el Fala, which is situated some 12 Km to the east of Wadi Rum, and just to the north of the eastern end of Khor el 'Ajram towards the southern end of Wadi Um Harraq. This site, which is on the eastern side of Hidheb el Fala, consists of clearly discernible wall and house foundations (Pl. XXX, 1). Straight and circular walls of 30m and 50m respectively enclosed what appear to be the foundations of the walls of circular houses which have diameters ranging between 13m and 22m. The site

would appear to embrace an area of 250m by 400m. The site had recently been ploughed by Bedouin who may have removed, or significantly disturbed the southern end of the site (Pl. XXX, 2).

As is indicated in the pottery analysis, sherds gathered at this site were predominantly Chalcolithic. A large number of small flints were found, and several flint knapping circles with partly worked flints in situ were found.

Ascending the heights of Hidheb el Fala three other small circular house walls were found. These structures were apparently situated so as to command a view to areas to the east and south. A few stylised rock drawings, quite unlike those mentioned above, were also found on the sandstone walls of Hidheb el Fala. This site seems to be an important indication of the nature and size of village type occupations in this area to the east of Wadi Rum. The size of the site also suggests that conditions at one time prevailed which allowed more extensive and relatively permanent settlement in the area.

As can be seen from this sherd analysis, there would appear to be a very wide range of periods represented. Attention is drawn to the pattern suggested by the Chalcolithic and Iron Age I sherds and the absence of sherds from the intervening periods. At the same time, however, the sherd from Um Guwe'ah in the Wadi Rumman, which seems to be Midianite, suggests that further research may identify other similar Iron Age ware.

Pottery Analysis*	Pottery Neolithic	Chalcolithic	Iron Age	Roman	Late Roman	Nabataean
Wadi Yutum : Kh. el Khaldi				✓	✓	✓
Wadi Rumman : Rakbat Um Edgeyer			✓ IAI	✓		
Um Skhari				✓		
Jebel Utud			✓ IAI-2		✓	
Jebel Abu Sagar			✓ (?)			
Gleb Rumman	✓ (?)			✓		
Um Guwe'ah	✓ Late	✓		✓		
Wadi Rum : Jebel es-Sad				✓		
Makman el Jahali				✓		
Abu Ain Kheli				✓		
Khor el 'Ajram : Hidheb el Fala		✓		✓		
Wadi Ishrin : Um Uqser	✓			✓		
Wadi Dhiqa : Dhega			✓ I.A.2	✓		
Wadi Sabit : Abu Hamet		✓		✓		
Hisma : Um Ghadha		✓ (?)	✓	✓		

\*The preliminary analysis of these sherds was completed under the supervision of Mrs. C.-M. Bennett O.B.E.

When this analysis is considered in the light of the flints, the rock carvings, and inscriptions in the area, it seems reasonable to argue that this southern part of Jordan was occupied from a very early period. The nature and extent of this occupation as well as the continuity of particular phases of habitation of this area still remain open issues. However, the large Chalcolithic site discovered at Hidheb el Fala, as well as the other smaller sites which have sizeable clusters of wall and house foundations, suggests that the area was able to sustain small villages from time to time.

### The Early Iron Age 'Midianite Sherd

This sherd was found at Um Guwe'ah in the Wadi Rumman (Pl. XXV, 1-2). It has affinities with the Timna ware and also the Quweira ware from the North West Hejaz. The sherd is full of black grits varying from 3mm to 0.05mm.

It is burnished on both sides. The interior, which has been fired to a yellow brown, has a black painted decoration of poorly executed arcs. The sherd was probably the base of a small bowl.

### The Chalcolithic Pot from Rewes El Khel

This pot was found at Rewes el Khel with its broken base just visible in the dust (Pl. XXXII, 1). The pot appears to have been buried upside down. The pot was full of earth. Part of the base was found nearby.

This is a holemouth jar. It is handmade from very coarse impure clay with many grits of both quartz and flint measuring 4mm to 1mm.

The pot was broken in antiquity and recently. There is some attempt at smoothing on the exterior. The rim is very irregular. There is a stubby ledge handle on one side of the pot,

however, there is no sign of a second ledge handle opposite. The pot was probably locally made. Its dating is difficult as so little is known about this area; probably Chalcolithic.

This particular pot raises important questions with regard to the ceramic tradition of Southern Jordan and the nature of the relationship of that tradition to the traditions of neighbouring areas. It is possible that this pot was designed to be a cooking pot but was cracked in the firing and hence never actually used for the purpose for which it was intended.

### Conclusion

The large number of 'early' sites suggests that the Wadi Rum complex was extensively inhabited by small village-type groups of five or more houses. Thus, instead of nomadic occupation which, in the light of the modern Bedouin phenomenology, is often posited for this area, it would seem that there were significant clusters of houses, or basic dwellings, often situated in such a way as to control the entrance to the larger Wadi complexes.

In this survey the term *Wadi Rum complex* is used in the sense that the Wadi Rum appears to have been part of a large system of Wadis

each running north-south but interconnected by east-west passages. This complex also extends to the south and in some interesting instances would seem to connect with the coast.

It is suggested that, like the Wadi Sirhan, the Hisma region into which the Wadi Rum complex feeds was not only one of the most important caravan trade routes linking the southern Levant with the trade of the south, it was also clustered with early centres of settlement. How these settlements functioned in past micro - and micro - Sociocultural systems along with a scientific study of the environmental character and ecological stability of Aqaba-Ma'an areas under survey are issues which it is hoped future planned surveys will elucidate. For the time being, however, it has been established that there is substantial evidence of human occupation which appears to have extended to the south and east of the Wadi Rum into areas which had previously been thought to be either unpopulated or purely the domain of the pastoral nomad. Comparison with the settlement patterns of the Wadi Araba suggests that there may be some interesting links connecting the patterns of settlement and the development of human civilization in these two areas.

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