



Research Article

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The Hidden Landscape: The Shawbak North Archaeological Project (SNAP) Results Survey of First Season 2010

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Doi: 10.2478/mjss-2018-0150

Abstract

The North Shawbak Archaeological Project (NSAP), aims to shed new light on the general occupational history of the northern part of the Shawbak area and anticipates a total of seven years from 2010 until 2017 for the whole research period. The first phase (2010-2012) was devoted to a general survey for building up an archaeological database of the research area. The second phase (2013-2017), on the other hand, is to proceed to a full-fledged investigation at a few promising sites located in the course of the survey. In addition, The survey area is under arid environmental conditions and local vegetation is poor especially in lowlands. However, it is relatively rich in water resources due to the unique topography. As results of survey a total of twenty sites were registered in Area1, they fell into several site types described here follows a supposed chronological order of each group.

Keywords: Shwabak, Archaeological Project, Inscription, Prehistoric, Ceramics, Khirbet

1. Introduction

Shawbak region extends along the northern part of the Sharah mountain and cover the area from Fjaje to Jarba, and can generally be described as high plateau, with an increase in elevation from 1100 to 1600m ASL (Koucky 1987; Rwashdih 2002; Bdour et al 2012; Shqairat 2018). Its vegetation region is of the Mediterranean type with soil of terra rossa type (El-Esawi 1985; Twaissi and Shqairat 2012). Its climate region is of the warm temperate rainy type where annual average rainfall is around 300mm (Shehadeh 1985). The North Shawbak Archaeological Project (NSAP), (Fig. 1), headed by the authors, is a joint research project between al-Hussein Bin Talal University, Jordan, and Kanazawa University, Japan. It aims to shed new light on the general occupational history of the northern part of the Shawbak area and anticipates a total of seven years from 2010 until 2017 for the whole research period. The first phase (2010-2012) shall be devoted to a general survey for building up an archaeological database of the research area. The second phase (2013-2017), on the other hand, is to proceed to a full-fledged investigation at a few promising sites located in the course of the survey.

The 2010 summer campaign, conducted for about two weeks from October 3 to October 14, 2010, falls on the first field season of the seven-year project and focused on a reconnaissance

survey for exploring archaeological potential of the research field and defining a direction for the subsequent field seasons. Six archaeologists, an archaeobotanist, and a dozen archaeology students from both universities participated in the field operation. (Incidentally, our joint research project also aims to establish an educational in-field program for B.A. and M.A. students of both universities. The program shall provide them with an opportunity to cultivate a better understanding of the unparalleled archaeological heritage of Jordan as well as learn expert skills for field research. The following results of investigation.

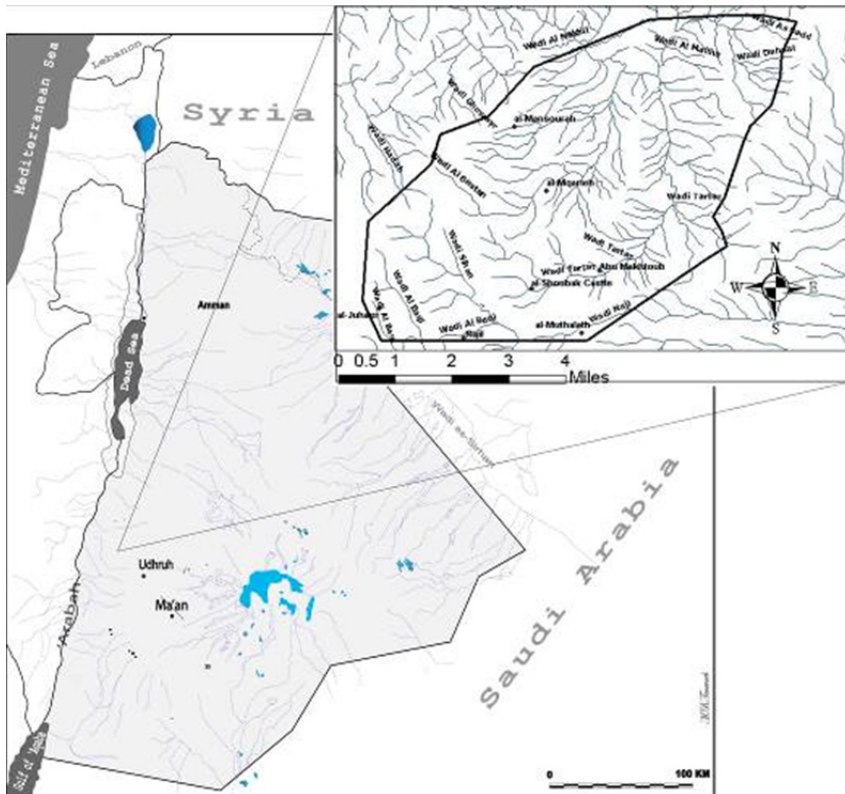


Figure 1: map showing the location of the survey area.

2. Research Field

Our research field is the large-scale depression to the north of the modern town of Shawbak, and its considerable portion lies in an area called Badda. The northern limit of the research field is the escarpment which overlooks Wadi Dihdel), whereas the southern limit is defined by the modern highway leading from Shaubak to Petra, on one hand, and the local paved road connecting Shawbak (Najil) and al-Juhaier, on the other hand. The eastern boundary is the western edge of al-Fjaje escarpment, and the western boundary is the escarpment extending northward from the village of al-Juhaier. The total area is ca. 12 square kilometers. The eastern edge is the highest in elevation (ca. 1265 m), and the western edge is the lowest (ca. 810 m).

Overall, the research field is characterized by the large vertical interval but varies in minor topography. The Badda area, for instance, consists of gentle hills covered with basalt boulders, through which several minor drainage systems flow. They run in either east-west or west-east direction and drain into Wadi al-Bustan, which in turn runs northward (and then westward) to join

Wadi Araba. Wadi Dihdel runs east-west to drain again into Wadi al-Bustan. The western half of the research field, or the area to the west of the Wadi al-Bustan drainage system, consists mainly of limestone hills and deep gorges. This is especially the case with the area below the villages of al-Mansurah, al-Muqarieh, and al-Juhaier.

The research area is under arid environmental conditions and local vegetation is poor especially in lowlands. However, it is relatively rich in water resource due to the unique topography. Several perennial springs are dotted in and around the main villages referred to above, providing water to fruit orchard as well as the inhabitants. In addition, seasonal springs exist on river beds of the major drainage systems such as Wadi Dihdel and Wadi al-Bustan, making up for the deficiency of water resource.

3. Previous Research

Despite the location encompassed by the Kerak / Tafila highlands to the north, the Wadi Musa mountainous range to the south, the Jafr Basin to the east, and the Wadi Feinan drainage area to the west, the Shawbak area has been less intensively investigated for no special reason. Aside from several examples including the long-term investigation of the Shawbak Castle (Brown 1988; Vannini 2011; Brown and Rielly 2008-2009), a Palaeolithic survey along the Fjaje escarpment (Rollefson 1981a; 1981b; 1985), a brief investigation at the dolmen fields of Umm Tuwyrat (Dubis et al. 2004; Scheltema 2008), and the recent survey and excavation project focusing on the Iron Age around Khirbat ad-Dabba (Whiting et al. 200; 2009).

French team from IFPO surveyed the area around Shawbak in 2003-2006 over three campaigns and discovered traces of the burgus below the castle hill and remains of the several watchtowers and structures connecting Shawbak with the Petra and Wadi Musa area (Devais et al. 2012). The surveys and excavations of Neil Smith around Shawbak uncovered several sites of this age, most of which agricultural settlement sites (Smith 2005a; 2005b; 2007). Recently, a team from University of Florence has also engaged study of the structures in Shawbak Castle (Nucciotti 2007). No substantial investigation has taken place. This is especially the case with our research field. With the only exception of a brief reconnaissance focusing on Neolithic sites (Fujii 2007; 2012), no extensive survey was conducted in the isolated topography separated by the Fjaje escarpment from the plateau. Understandably, little is known about the general land use history of the Shawbak area. The deficiency in archaeological information at the crossroad divides the adjacent four key areas into sections, still impeding a comprehensive discussion on the archaeology of southern Jordan. It is for this reason that we embarked on the joint research project.

4. Survey Methodology

Ahead of the survey, we conducted a brief inspection of the entire range of our research field to understand its general topography and determine the survey methodology. On the basis of these results, we divided it into four areas roughly in an order from the north to the south. Landscape features, especially wadi systems and escarpments, were utilized to specify the boundaries of each area.

This pilot season focused only on Area 1 (Fig. 1). This area is gradually descending westward from the Fjaje escarpment towards Wadi al-Bustan, forming a series of natural terraces and small hills. Two survey methods were used in combination. The first method was an overview by means of the satellite images of Google Earth, which was useful in plotting major archaeological features. The second was on-foot traversing, which was essential to identifying minor features such as rock arts and inscriptions. Every site thus located was recorded individually in our registration form that includes items such as registration number, site location, structural remains, and surface finds.

5. Prehistoric Sites

Two lower Palaeolithic sites, probably of the late Acheulean stage, were recorded on agricultural fields southwest of the contemporary site of Fjaje (Rollefson 1981a, 1981b). The first site NS-

02013, was located to the western side of the eastern edge of the Fjaje site, and the second one NS-01018 was located to the northwest of the site 02001. Surface finds at NS-02013 are scattered over a large area (Fig. 2), while those at NS-01018 are limited to a smaller area. Several bifacial tools were collected from both sites, which included Lanceolate, Cordiform, Ovate, Cleaver, and Abbevillian and other type of artifacts. The larger assemblage was found at NS-02013, which lay near the terrace edge and most of the tools were collected from the newly ploughed agricultural field. The collected assemblages from both sites are nearly identical to the Fjaje assemblage in terms of the tool type and relative frequency of every tool type.

In addition, a large PPNB settlement (NS-01001) was also registered at the northern slope of Wadi Badda. This site was found for the first time in 2007 by one of us and briefly described elsewhere (Fuji 2007). We revisited the site and double-checked the previous observations.

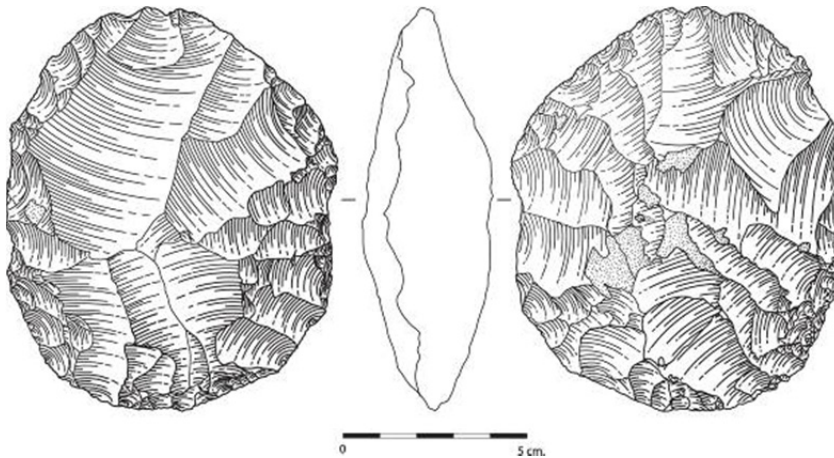


Figure 2: Lower Palaeolithic bifacial tool from site 02001.

6. Khirbet Sites

Two khirbets were documented in Area 1: Khirbet Badda the upper (NS-1002) and khirbet Badda the lower (NS-01005). (Fig. 3). Both sites contained many structures with internal divisions. Khirbet Badda the upper included a rock-cut cistern as well. Both sites were surrounded by agricultural fields, field walls, and corrals, all of which strongly suggested that agriculture and animal breeding constituted two major economic activities of the inhabitants. Also of interest was the fact that ancient roads connected the two sites. One of them further stretched until Abu Makhtoub several kilometers to the south.

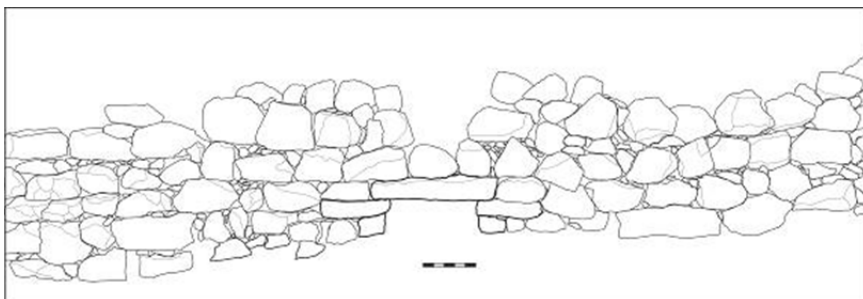


Figure 3: Khirbet Badda the upper, a wall in the southern part of the Khirbet.

The structures at both sites were built of basalt cobbles and boulders, and some walls still retained a height of more than 1.5 m. (Fig. 4). Ceramic finds suggested that the sites were inhabited from the Nabataean to the late Islamic period. While Khirbet Badda the lower focused on Painted Nabataean pottery sherds, Khirbet Badda the upper concentrated on Ayyubid-Mamluk ceramics. The presence of Greek and early Islamic inscription in the vicinity of the two sites might bridge the chronological gap between the two sites. In view of the remarkable site size, they can probably be defined as major settlements in the northern area of Shawbak.



Figure 4: Khirbet Badda the upper from the south east.

7. Ancient Roads and Tracks

A few ancient road networks were identified (Fig. 5). As noted above, a major road (NS-01008) connected Khirbet Badda the upper and the village of Abu Makhtoob. Another road (NS-01015) stretched from Khirbet Badda the upper, via Khirbet Badda the lower, toward Wadi al-Bustan. These roads were not more than 3m. in width, being fringed with a pair of stone alignments ca. 0.2-0.3 m in preserved height. Tracks focused on the western slopes of the Fujaij Plateau. One track (NS-01017) connected Khirbet Badda the lower with other ancient sites on the flat terrain of the plateau. A Greek inscription was found on along this track. In addition, several tracks connected settlement sites with their surrounding features such as agricultural fields and enclosures.



Figure 5: A major road connected Khirbet Badda the upper and the village of Abu Makhtoob.

8. Clearance Mounds and Terraces

Area 1 included a large number of clearance mounds. The interval between any two mounds were small and regular, indicating that they were created as a result of cleaning and clearing the ground for agriculture. They focused on slopes, and no examples were found in the flat terrain. Terraces or leveled agricultural fields were also found in large numbers. As with the clearance mounds, they also concentrated on the western slope of the al-Fjajj escarpment. It seems that they were constructed for reducing the speed of run-off surface water and consequently preventing the erosion of surface soil. The terraces were often associated with rubble mounds, which highlighted land exploitation activities for agriculture. Nothing conclusive can be said about the date of these small features, but it is conceivable that some of them were combined with the Nabatean settlement to form an agricultural complex.

9. Petroglyphs and Inscriptions

Area 1 is characterized by the frequency of petroglyphs (Fig. 6). We recorded hundreds of basalt stones that depicted animals and human figures. The animal figures included ibex, dogs, camels, horses and possibly foxes, among which ibex designs were overwhelmingly predominant. However, in view of the difference in degree of patination and style of representation, they probably include various examples different in date. On the other hand, the human figures appeared usually in hunting scenes, in which they raised their hands or carried something in their hands to drive games. Some petroglyphs represented human figures associated with dogs or riding a horse or a camel. One example depicted a human figure standing on a carriage led by an ox. There were also modern rock arts. Understandably, they were slightly different in style and technique from the ancient examples, being easy to distinguish.



Figure 6: Rock drawing from area 01.

In addition, North Arabian, Nabataean, Greek and early Islamic inscriptions were also documented. They were inscribed on patinated surfaces of basalt boulders. Some of them were found within a permanent settlement site, but none of them were found on architecture walls. Anyhow, the presence of the various inscriptions indicates that the study area was continuously inhabited (or at least visited) throughout the first millennium A.D. It is also conceivable that the land use history of the area dates back to the first millennium BC. The inscriptions were short in sentence and, in some cases, written in a frame. A preliminary reading of the inscriptions suggests that they were mere graffiti. We should also note that they were often found on hillsides or hilltops where shepherds

could relax and get some air. It should be added, however, that Greek inscriptions were founded along the ancient track connecting Khirbet Badda the upper with the al-Fjaje Plateau. Short Greek inscriptions are all written in a tabula ansata. They consist of names and the Greek word 'greeting', the dating of this kind of inscriptions is not easy. The known 'Syrian-Greek' names seem to belong to the pre-Christian Roman period (Fig. 7).



Figure 7: Greek inscriptions from area 01.

10. Conclusions

Our pilot survey proved that the research field was rich in archaeological features. This makes sense, however, considering that it was encompassed with the densely-populated areas. Of particular significance is the existence of the PPNB settlement (Wadi Badda) and the Nabatean settlement (Khirbet Badda the lower), both of which deserve full-scale investigation. The possible Nabatean roads and terraces are also highly interesting and require further scrutiny. Given the combination of these archaeological features, the research area might provide an ideal scene for exploring a total image of a standard Nabatean settlement inclusive of surrounding small features. Also of interest is the frequency of petroglyphs and inscriptions, which probably has something to do with the abundance of basalt boulders as a suitable canvas. The study area can be an excellent research field in this aspect as well. However, our project has just started and much still remains unclear. The next campaign, scheduled in the early autumn of 2011, is to continue our efforts for a comprehensive understanding of the land use history of the research area.

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