GHAWR AŞ-ŞĀFĪ SURVEY AND EXCAVATIONS 2008-2009

Konstantinos D. Politis, Adamantios Sampson and Margaret O'Hea

Introduction

Survey and excavations in Ghawr aṣ-Ṣāfī continued during January-February 2008 and February-March 2009 in collaboration with the Hellenic Society for Near Eastern Studies and the Universities of the Aegean and Adelaide. The project was jointly directed by Dr K. D. Politis, Professor A. Sampson and Dr M. O'Hea.

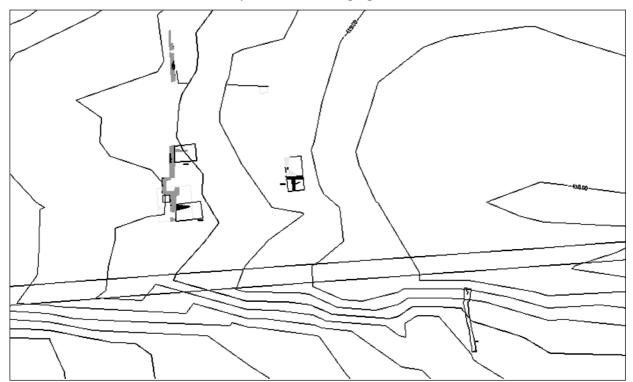
Survey

Survey work conducted during this season was limited to making a new contour map joining the Ṭawāḥīn as-Sukkar, Khirbat ash-Shaykh 'Īsā and an-Naq' sites (**Fig. 1**), using work at Ṭawāḥīn as-Sukkar and earlier surveys to con-

nect the areas and create an overall site map. This will form the basis of a map of historic Zoara / Zughar and guide future land expropriation.

The cemetery site at Ard Ramlat-Ghalib first identified in 2007 was more closely investigated, but it was not possible to gain access to the land to properly survey it as it is a private property surrounded by a wire fence. Pottery and an inscribed stone recovered from there dates to the 1st to 3rd centuries AD (**Fig. 2**).

The field survey of the eastern Dead Sea coast which was planned for this season was postponed, but aerial photographs were studied in preparation for it in the near future.

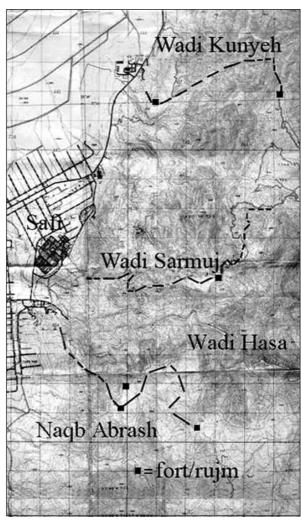


1. Up-dated contour map of Khirbat ash-Shaykh 'Īsā and Ṭawāḥīn as-Sukkar (after Q. Desouqi).



2. Funerary sandstone stele inscribed in Greek enclosed in a tabula ansata reading: "...Selames (son) of Soudelathes (?) who died 30 (?) years (old)". On top is a Nabataean nefesh sign. Dating to 1st-3rd centuries AD. From Ard Ramlat-Ghalib cemetery (photo: K. D. Politis).

During 2009 field-walking identified a third road connecting Ghawr aṣ-Ṣāfī with the Karak plateau (**Fig. 3**). This one was just north of Wādī Kunayyah (**Fig. 4**), was stepped in a simi-



4. Location map of Wādī Kunayyah.



3. Wādī Kunayyah descending to the Ghawr aṣ-Ṣāfī and Dead Sea from Karak plateau (photo: K. D. Politis).

lar manner to the one at Wādī Sarmūj (Politis 2007) (**Figs. 5 and 6**), and was guarded by at least two small forts ($ruj\bar{u}m$), one near the valley floor and the other near the top of the plateau. Both had been recently disturbed by looters who exposed the internal architecture and 1st to 3rd century AD pottery sherds, including Nabataean fine wares. The lower section of the road was



5. Wādī Kunayyah stepped road'; lower, SW end (photo: K. D. Politis).



6. Wādī Kunayyah stepped road'; upper, NE end (photo: K. D. Politis).

cut through the Sarmūj conglomerates, and the upper section through limestone bedrock.

Excavations

Excavations were limited to two areas of Ghawr aṣ-Safi during this season. The first was at the intersection of Wādī(s) Ḥamarāsh-Suwayf and al-Ḥasā. The second was at Khirbat ash-Shaykh 'Īsā, was aimed at completing trenches opened in 2006-07.

Wādī Ḥamarāsh-Suwayf

Two seasons of excavation were conducted at the PPNB site of Wādī Ḥamarāsh-Suwayf during during January 2008 and February-March 2009.

The site is located on an extended plateau north-west of the junction of Wādī(s) al-Ḥasā and Ḥamarāsh-Suwayf (lat 31°016.783' long 35°542.582'). Today the wadi flows at a much lower level than ten thousand years ago, when the river bed would have been close to the site. The arid plateau has Wādī Ḥamarāsh on the east, a smaller wadi on the west and steep mountains to the north. Today, the site is isolated and inaccessible; it is an eight-hour walk from the village of aṭ-Ṭaybah on the Karak plateau, and about a three-hour walk from modern aṣ-Sāfī.

The Neolithic settlement extends for about half a hectare on its own plateau (**Fig. 7**). This plateau is roughly circular and elevated in relation to the surrounding area. On this plateau are closely-built house-walls, as well as stacked stones which may have been collected to form a perimeter wall around the settlement. Traces of buildings are however attested outside this perimeter wall. The area has been excavated in the past by looters. In their robber trenches we could see well-built walls, door and window openings,



 PPN-B site at Wādī Suwayf-Ḥamarāsh (photo: K. Kostandopoulos).

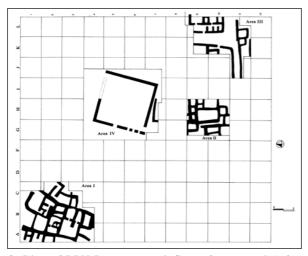
and even parts of possible staircases. Groundstone tools, chipped-stone tools and fragments of stone vessels were visible all over the surface.

In 2008, two 10 x 10m trenches were opened (**Fig. 8**).

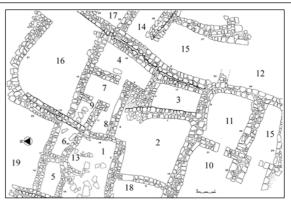
Area I (150m²) comprises the north-west part of the settlement (**Figs. 9a,b,c**). Thick walls, probably belonging to high buildings from earlier in the settlement's history of occupation, and thin walls separating rooms within buildings have been exposed by our excavations. Nineteen rooms were excavated in this section. They were trapezoid in shape with rounded corners. Floors were usually 0.30m below the plateau ground surface. Smaller rooms, possibly storage rooms (such as Rooms 7, 8 and 9), were connected to larger rooms via narrow openings. This architecture closely resembles that found at Bayda. Rooms 10, 11 and 15 are interconnected via similar openings.

In most cases, there were no doors between rooms. A slab discovered in Room 2 may be a door sill or threshold. Wall 12, between Rooms 7 and 8, belongs to a later architectural phase. Storage Rooms 5, 6 and 13, which are within a large room excavated to a depth of 1.40m below the plateau ground surface without reaching its floor, also belong to a later architectural phase. These three storage rooms were roughly-built. Among our finds from the rooms were many millstones and ground stones made of local sandstone.

Double walls were uncovered at the eastern side of section I (Rooms 16, 17, 3), which prob-



8. Plan of PPN-B site at Wādī Suwayf-Ḥamarāsh (after A. Sampson).





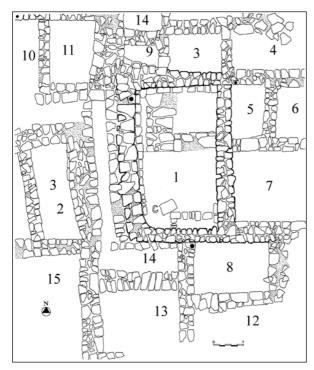


9. (a, b) PPN-B site at Wādī Suwayf-Ḥamarāsh (after A. Sampson).

ably indicates different ownership. Rooms 14, 15 and 17 belong to a building that continues further east. Our preliminary hypothesis is that there were three different extended structures and two or three architectural phases.

Apart from numerous ground stone tools, many flint artefacts (blades, pointed tools and cores) were recovered, along with several worked bone tools. A worked, rounded and incised piece of limestone was identified, which may be a non-standard tool or perhaps even part of a figurine.

Area II (80 m²) is at the south part of the settlement (**Fig. 10**). Parts of walls of a building previously excavated by looters were already visible. These walls were constructed of large



 Plan of PPN-B site at Wādī Suwayf-Ḥamarāsh (after A. Sampson).

heavy stones. Traces of post-holes for the first floor beams were evident. Excavation concentrated on the northern part of this building. At 0.80 - 1m below the plateau ground surface, we discovered a stratum of burnt soil with chipped stone arrow-heads, fragments of stone vessels and animal bone. The next stratum consisted of dark soil, with numerous stone artefacts and traces of burnt remains.

Fewer artefacts and animal bones were found at 1.15m below the plateau ground surface, although the presence of an ovoid bead made of green stone should be noted. At 1.35m below the plateau ground surface we discovered a wall 1.30m wide, made of large flat stones and possibly belonging to an earlier architectural phase. Future excavation should clarify the architectural phasing of the buildings in Area II.

Small rooms have been discovered around this main building. In the north, there are four independent small rooms (Rooms 3, 4, 9 and 11) which we excavated to a depth of 0.30m below the plateau ground surface, discovering many millstones, ground stone artefacts and lithic blades (**Fig. 11**) in the process. Small rooms were also found to the east and the south. The excavation of Room 13 at just 0.20m be-



11. PPN-B site at Wādī Suwayf-Ḥamarāsh (photo: K. Kostandopoulos).

low ground surface was very interesting, since we discovered blades, arrow-heads and animal bones, including sheep / goat. Many animal bones and stone tools were discovered in Rooms 8 and 12 at the south-east side of the trench. Room 2 comprises a different entity and had been excavated by looters.

The architectural phases of Area II cannot be determined at this stage, and there is as yet no firm dating evidence. Soil samples were collected to help date the excavated rooms. Finds so far indicate a likely date of the earlier part of the Late PPNB. Excavation will continue next season, while post-excavation analysis will focus on the study of the stone tools, stone vessels and animal bones. So far, we can highlight an abundance of millstones, collected as surface finds and during excavation. Millstones made of limestone, the most commonly occurring stone in the area, suggest extensive food preparation as well as the cultivation of cereals. Since the area is located in an area of deep canyons and steep mountains, we assume that site's occupants intensively cultivated the plateau around the settlement, taking full advantage of any water in the wadis.

During the 2009 season, excavations continued in Area I, with extensions to the west, east and north. On the western side five storage areas were discovered with many ground stone tools. Locus 1 was excavated to a depth of 3.10m but at 1.80m there was a buttress wall which may have supported an upper floor. A burnt layer was found at the height of the foundation of the wall. The overlaying Locus 2 floor layer was found at a depth of 2.20 metres. At the western

side of the room there were two semi-circular storage areas. On the eastern side, fragmentary human bones were discovered. Of particular interest was a low doorway leading to a smaller area (Locus 18). In this place many stone tools and vessels, ground stone tools, discs and mollusc shells were found. It is worth noting that in this room, possibly a workshop, there were also many drills which may have been used to make stone objects.

In Area II, the Locus 1 excavations begun in 2008 were completed at a depth of 2.30 metres. The last layer was a thick ash deposit. Excavations of Locus 13, begun in 2008, were continued with the discovery many stone tools and dozens of arrowheads.

East of Area II, a new trench measuring 16 x 10m was opened and designated Area III. Here, an open area was discovered, which may be a courtyard with small storage areas to the east and west which communicated via narrow doorways. The layout of these small narrow passageways where many ground stone tools were found is reminiscent of the 'beehive' buildings at Bayda. A 1m wide passageway leads to the central courtyard, which may be interpreted as a road. At the north-eastern side of Area III, a building with poorly preserved walls was excavated to a depth of 1.90m.

The biggest surprise of the season's work came during the final days when a 13m square building (Area IV) was uncovered in the centre of the settlement (Figs. 12a,b). Its construction using carefully-chosen flat slabs differed from that of other buildings on the site. Excavations here continued to a depth of only a few centimetres, but it is certain that this building is preserved to a great height. This was evident from our test-trench on its north side, which went down to 1.60 metres without finding the bottom of the wall. This building has three entranceways on three of the corners and three narrow openings, perhaps windows, on its western side. In contrast with other building and room plans from the site, the Area IV building is so far the only one which is square-shaped. The full excavation of this building remains to be completed next season.

A large number of lithics were found during the season's excavation, including points, borers, tanged and serrated tools, and sickle blades



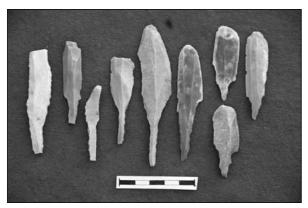


12. PPN-B site at Wādī Suwayf-Ḥamarāsh (photo: K. Kostandopoulos).

(**Figs. 13 and 14**). It is very significant that over 500 ground stone tools were discovered during excavation, in addition to some 400 collected from the surface of the site (**Fig. 15**). A large number of open and closed-shaped bowls and basins were also found. Other interesting finds include pierced ground stones (**Fig. 16**), two bone borers (**Fig. 17**), pierced marine shells for a necklace, marble figurines (**Figs. 18 and 19**) and a bone ring. Animal bones were particularly abundant in Areas I and II.



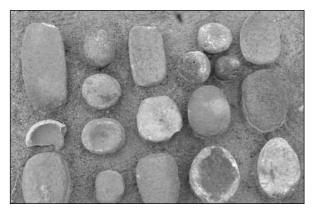
13. PPN-B flint tools from Wādī Suwayf-Ḥamarāsh (photo: G. Tampakopoulou).



14. PPN-B flint tools from Wādī Suwayf-Ḥamarāsh (photo: G. Tampakopoulou).



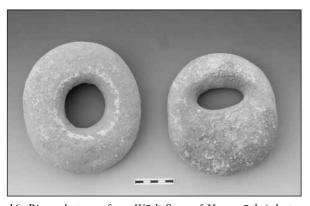
17. Bone tools from Wādī Suwayf-Ḥamarāsh (photo: G. Tampakopoulou).



15. Ground stones from Wādī Suwayf-Ḥamarāsh (photo: K. Kostandopoulos).



18. Marble figurine (?) from Wādī Suwayf-Ḥamarāsh (photo: G. Tampakopoulou).



16. Pierced stones from Wādī Suwayf-Ḥamarāsh (photo: K. Kostandopoulos).



19. Marble figurine (?) from Wādī Suwayf-Ḥamarāsh (photo: G. Tampakopoulou).

Recently, a corresponding site has been excavated on a terrace situated on the south-eastern bank of Wādī al-Ḥasā (Peterson 2009: 311-323). This has similar architecture, PPNB flint tools (Peterson 2009: 315) and pierced ground stone (Peterson 2009: 318). Considering that the wadi would have been at a much higher level and the waters would have flowed past both these sites,

it is possible that they may have been associated in some way.

Khirbat ash-Shaykh 'Īsā

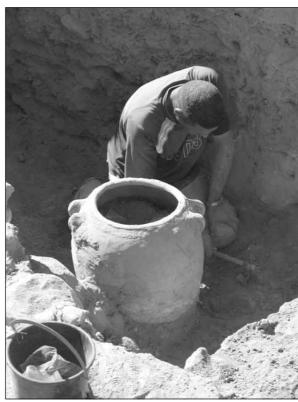
Excavations at Khirbat ash-Shaykh 'Īsā in Trenches II and VIII were continued from the previous 2006-7 season, revealing sequences of architecture and occupation from the Abbasid

(8th century AD) to the Mamluk (ca 15th century AD) periods (**Figs. 20 and 21**).

The most significant advance in our understanding of the architectural phasing came with the establishment of the history of a small paved street leading through an arched, 1.82m wide entrance in the north-south Wall 2 (**Fig. 22**). This 1.6m wide ashlar sandstone wall has a projecting room to the west, just north of the small archway which suggested that this might be a city wall with towers. However, the relatively narrow width of the archway meant that this was not the main entrance through this wall, and small-scale excavations in this area in 2004 could not fully clarify the function of either Wall 2 or the archway.

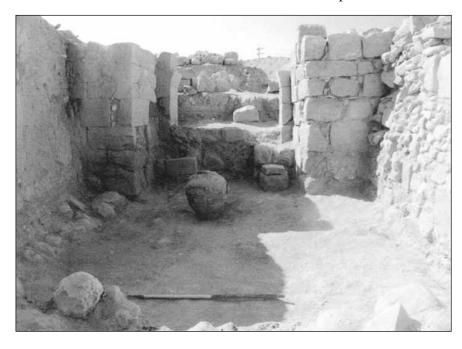
At the end of this season, a paved sandstone street was identified in Trench II, leading eastwards from the archway (**Fig. 23**). It extends more than 41m to the east, into Trench VIII. Time constraints prevented excavation beneath some of the pavers, so at present the chronology for the construction of the street remains unclear. At least two sandstone columns still *in situ* indicate that this was a colonnaded street. The pavement was laid after the construction of Wall 2 and its doorway.

To the west of the archway, a narrow lane or perhaps internal corridor was floored with an almost completely degraded mosaic floor of white limestone *tesserae*.



21. Abbasid-period pottery storage jar as found during excavations at Khirbat ash-Shaykh 'Isā. (photo: K. D. Politis).

Trench VII has an earlier, well-built ashlar sandstone Wall 11 running east-west, which continued to be used throughout the medieval period. As with Wall 2, it survives *ca* 3m (nine

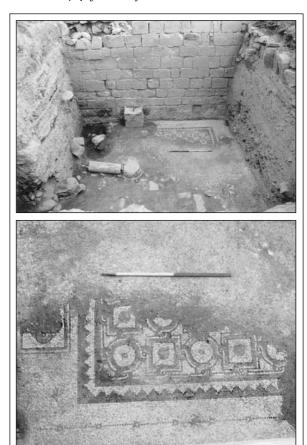


20. Western view of arched entrance blocked by stones and store jar of the Abbasid level. Khirbat ash-Shaykh 'Isā trench II (photo: M. O'Hea).



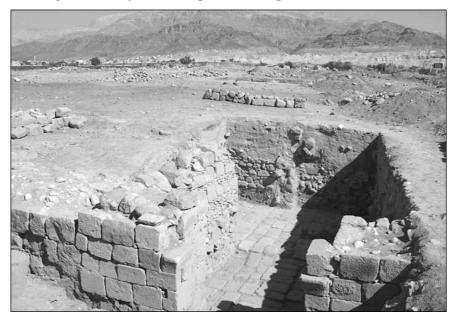
22. View west of trench II at Khirbat ash-Shaykh 'Īsā. (photo: K. D. Politis).

courses) above its original associated floor. This wall may belong to the same phase as the paving slabs and Wall 2 itself, but it is unlikely to be a southern return of that wall, as it is of different width. It forms the southern wall of a substantial building adorned by a mosaic pavement depict-



24. Mosaic pavement found at Khirbat ash-Shaykh 'Īsā (photo: M. O'Hea).

ing pomegranates and florets in alternating interlaced squares and circles (Fig. 24). Scattered on the mosaic floor were marble fragments.



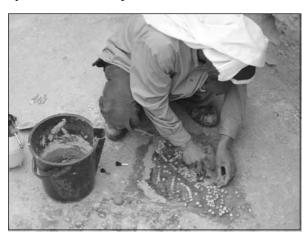
23. View east of trench II at Khirbat ash-Shaykh 'Īsā. (photo: K. D. Politis).

ADAJ 53 (2009)

Emergency consolidation was conducted on the mosaic by trained local staff, which was then buried for its protection and future conservation (**Fig. 25**).

The paved road in Trench II appears to continue along the southern face of Wall 11, and another marble column and colonnette were found in an abandonment phase over the paving slabs (**Fig. 26**).

The mosaic-paved room in Trench VIII was clearly degraded in antiquity. Part of the central floor bedding was so badly worn that earlier walls were clearly visible in the centre of the trench. Above the mosaic floor is a 10-15cm layer of nearly sterile soil, above which Abbasid-period occupation subdivided the building with rubble and adobe brick internal walls. Above this was adobe brick collapse, followed by two successive phases of burnt floors and oc-



25. Emergency conservation treatment of mosaic pavement at Khirbat ash-Shaykh 'Īsā (photo: K. D. Politis)



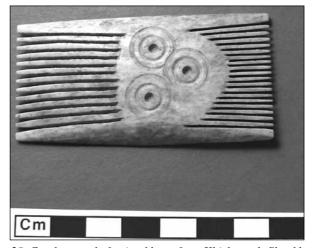
26. North view of 'abandonment phase' of paved street in Khirbat ash-Shaykh 'Īsā trench VIII south of Wall 11. (photo: K. D. Politis).

cupation. Preliminary analysis of these phases is suggestive of the early Ayyubid period in both instances. Above the second burning and collapse, a Mamluk-period courtyard (excavated in 2006-7) with *tabuns* and low adobe brick corrals suggests that this area was a modest domestic house in the 15th century AD.

Some of the more interesting finds of the season included a pottery 'kiln-tripod' used for stacking pottery bowls inside a kiln (**Fig. 27**), a finely carved and decorated bone comb (**Fig. 28**), a stone pebble painted as an anthropomorphic figure (**Fig. 29**), two pottery sherds inscribed in Kufic Arabic (**Figs. 30 and 31**) and, perhaps most remarkably, a copper alloy oil lamp re-filler (**Fig. 32**).



27. Pottery 'kiln tripod' from Khirbat ash-Shaykh 'Īsā. (photo: K. D. Politis).



28. Comb carved of animal bone from Khirbat ash-Shaykh 'Īsā. (photo: G. A. Sakelariou).

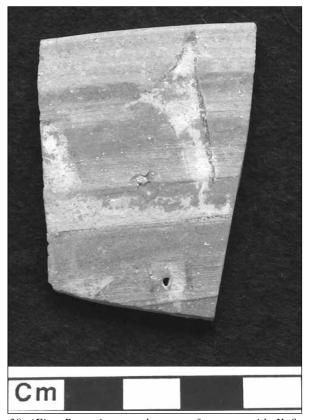


29. Pebble stone with painted anthropomorphic figure from Khirbat ash-Shaykh 'Īsā. (photo: G. A. Sakelariou).

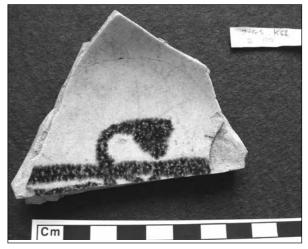
Excavations at Khirbat ash-Shaykh 'Īsā clearly need to be continued on a larger scale in order to reveal the complete plan of the site and fully understand the function of the architecture. However, the depth of the deposits, wealth of the finds within them and extent of the site require more substantial support that was then available. Furthermore, a systematic conservation programme including finds and architecture is imperative. Therefore, it was decided that excavations would not resume during 2009, in order to complete the post-excavation studies and publish the preliminary results.

The Staff

The survey was carried out by Konstantinos D. Politis, with Quteiba Desuqi as technical surveyor of the Department of Antiquities. The archaeological excavations were supervised by Margaret O'Hea (KSI) and Adamantios Sampson (WHS). The field supervisors



30. 'Fine Byzantine ware' pottery fragment with Kufic Arabic script made in Jerusalem region (?) during 6th-9th centuries AD, from Khirbat ash-Shaykh 'Īsā. (photo: G. A. Sakelariou).



31. Bowl fragment with opaque white tin-glazed and part of a cobalt blue Arabic letter made in Iraq during 9th century AD, from Khirbat ash-Shaykh 'Īsā. (photo: G. A. Sakelariou).

were Varvara Katsipanou, Andreas Argiridis, Ioanna Katsagiorgiou, Konstantinos Nizamias, Stavros Bazas, Kalliopi Giannopoulou, Katherine Bradley, Margaret Huthchinson, Alexandra



32. Copper alloy oil lamp re-filler from Khirbat ash-Shaykh 'Īsā. (photo: G. A. Sakelariou).

Ribeny, Anastasiya Silkatcheva, Stacey Stafford-Brookes, Amy Ziesing and Salha Suleiman Ghareeb (2008), and Panagiota Aneliki, Stylianos Klapakis, Ilias Sarantidis, Ioanna Karagiorgiou, Kalliopi Giannopoulou (2009). The objects and small finds were registered by Georgia Tampakopoulou and Sariah Willoughby (2008). The archaeological finds conservator was G. Aristotelis Sakellariou and mosaic conservator was Mohammed Ali Hashoush (2008). The photographer was Petros Konstantopoulos (2008 and 2009).

The Department of Antiquities was represented by Mohammed Zahran Hashoush in

2008 and Imad al-Drous in 2009. Locally hired workers came from Ghawr aṣ-Ṣāfī. The overall project was directed by Konstantinos D. Politis.

Post-Excavation Studies

In 2008-9 work began on studying the excavation finds with support from the Palestine Exploration Fund and Aegean University, concentrating on pottery (Tony Grey), small finds (Konstantinos D. Politis), animal bones (Louise A. Martin), and chipped and ground stone (Georgia Tampakopoulou).

The Committee of the Palestine Exploration Fund also agreed to publish a monograph on all the work done to date on the project in 2010.

Exhibition

Many of the objects from excavations at Ghawr aṣ-Ṣāfī will be on display in several exhibition cases in the new Museum At The Lowest Place On Earth, located at Dayr 'Ayn 'Abāṭa, near aṣ-Sāfī, as of 2010 (Politis 2009).

Acknowledgments

The project is grateful to the Director-General of Antiquities, Dr Fawwaz Khraysheh and his staff for granting permission to work in the Ghawr as-Safi. Thanks are due to the Jordan Valley Authority for allowing the project to use one of its housing units in Mazra'a-Sekine and Aramex International Couriers for logistics in Amman. The survey equipment was loaned from Municipality of Safi and the Department of Antiquities in Amman. The Palestine Exploration Fund and Optimiza Solutions provided additional support.

Konstantinos D. Politis, Hellenic Society for Near Eastern Studies, Athens, Greece kdpolitis@hsnes.com

Bibliography

Alt, A.

1935 Aus der 'Araba III:Inschriften und Felszeichnungen. ZDPV 56: 72-73.

Photos-Jones, E., Politis, K. D., James, H. F., Hall, A. J., Jones, R.E. and Hamer, J.

2002 The sugar industry in the southern Jordan valley: an interim report on the pilot season of excavations, geophysical and geological surveys

- at Tawahin as-Sukkar and Khirbat ash-Shaykh 'Isa in Ghawr as-Safi. *ADAJ* 46: 591-614.
- Jones, R., Tompsett, G., Politis, K. D. and Photos-Jones, E. 2000 The Tawahin as-Sukkar and the Khirbat ash-Shaykh 'Isa Project. Phase I: The Surveys. *ADAJ* 44: 523-534.
- King, G. R. D., Lenzen, C. J., Newhall, A., King, J. L. and Deemer, J. D.
 - 1987 A Survey of Byzantine and Islamic Sites in Jordan. Third Preliminary Report (1982). The Southern Ghor. *ADAJ* 31: 439-459; 618-620.
- MacDonald, B.
 - 1992 The Southern Ghors and Northeast 'Araba Archaeological Survey. J.R. Collis, Sheffield.

- Peterson, J. D.
 - 2009 The View from Khirbat al-Hammam: Neolithic at a Crossroads. *SHAJ* X: 311-323. Department of Antiquities, Amman.
- Politis, K. D.
 - The Conservation and Heritage Management of the Sanctuary of Lot at Deir 'Ain 'Abata. SHAJ X: 259-268. Department of Antiquities, Amman.
- Politis, K. D., Kelly, A. Foote, R. and Hull, D.
 - 2005 Survey and Excavations in the Ghawr as-Safi, 2004. *ADAJ* 49: 313-326.
- Politis, K. D., O'Hea, M. and Papaioannou, G. A.
 - 2007 Survey and Excavations in the Ghawr as-Safi, 2006-07. *ADAJ* 51: 199-210.