# EXCAVATIONS AT DEIR 'AIN 'ABAȚA 1990

by Konstantinos D. Politis

# Introduction and Objectives

The second season of excavations at Deir 'Ain 'Abaṭa in Ghor eṣ-Ṣafi took place in February, March and April 1990.

The objectives were to complete the survey of the site, make a contour plan including all the main archaeological structures and geological features, and to continue excavations in two areas openned in 1988<sup>1</sup> and begin one new area.

# Survey and Surface Work

A series of detailed maps of the main site and its environs was made which included contours from the southern trig point, TF 194, to Area J and the spring to the north (Fig. 1). All visible structures were planned including some not seen before (Fig. 2). The survey work done in 1987 and 1988 was amalgamated and incorporated into a new and more accurate site plan (Fig. 3).

About 3,000 architectural pieces on the surface were plotted for a distribution map, numbered in blue paint and described. Some finer pieces were removed to the Karak Museum, as the nature of the sandstone material of which they were made erodes easily in the wind and rain. The objective is to preserve representative samples of architectural elements, rather than to carry away all the building materials.

#### Area A

The condition of Area A after the 1988 season of excavation was relatively good considering two winter rain periods. Most of the exposed structures were intact except for the conduit in the deep sondage of A.I. which was smashed by vandals. Inspite of this unfortunate event, we

were able to gain more information about this structure by retrieving the pottery sherds which were cemented into the conduit channel. Furthermore, we were able to more closely examine the construction of the conduit which was made of larger stones than previously thought. After this investigation, work in A.I. was not continued. And, after a torrential rain storm which filled the sondage with water, and thus proving the function of the building of Area A as a reservoir, it was filled in with soil from excavations in other areas to the north.

The eastern side of Area A was cleared to the conglomerate bedrock in order to examine the construction of the building. Three more arch stubs were discovered (Pl. I,1). The method by which they were attached to the bedrock using cement and plaster was carefully recorded. The plastered water channels above this area which tapped rain water flows down the small wadis and led into the reservoir were also examined and planned. The complex system of water catchment at Deir 'Ain 'Abata will continue to be studied in the future as it is an important feature in the architecture and technology of building in arid climates such as that of Ghor es-Safi.

## Area B

The primary reason for continuing excavation in Area B was to resolve the function of the round stone-built structure in B.I. At the end of the 1988 season the structure had not been fully exposed nor had it been sectioned. Therefore, the assumption that it was an oven and that the ashy layers encompassing it derived from its use could not be supported.

During the 1990 season the original

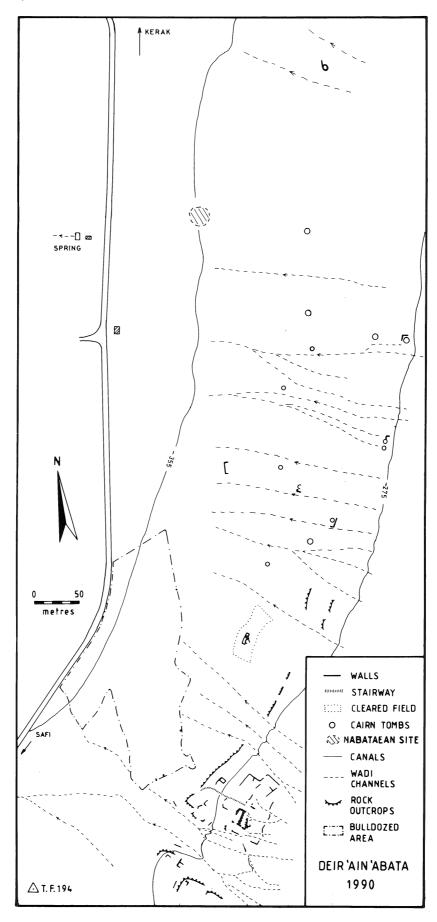


Fig. 1. Map of Deir 'Ain 'Abaṭa.

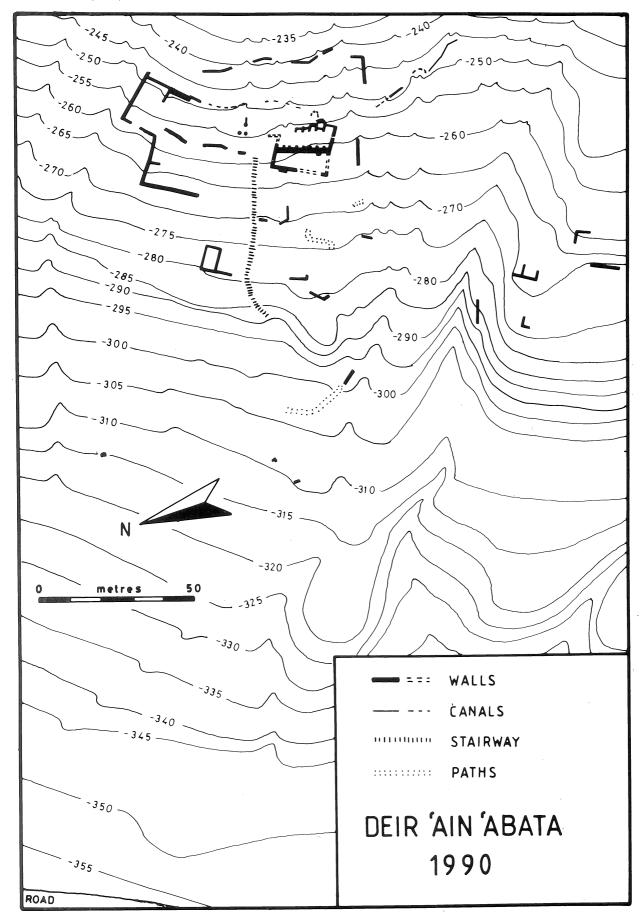


Fig. 2. Contour map and buildings at the main site of Deir 'Ain 'Abata.

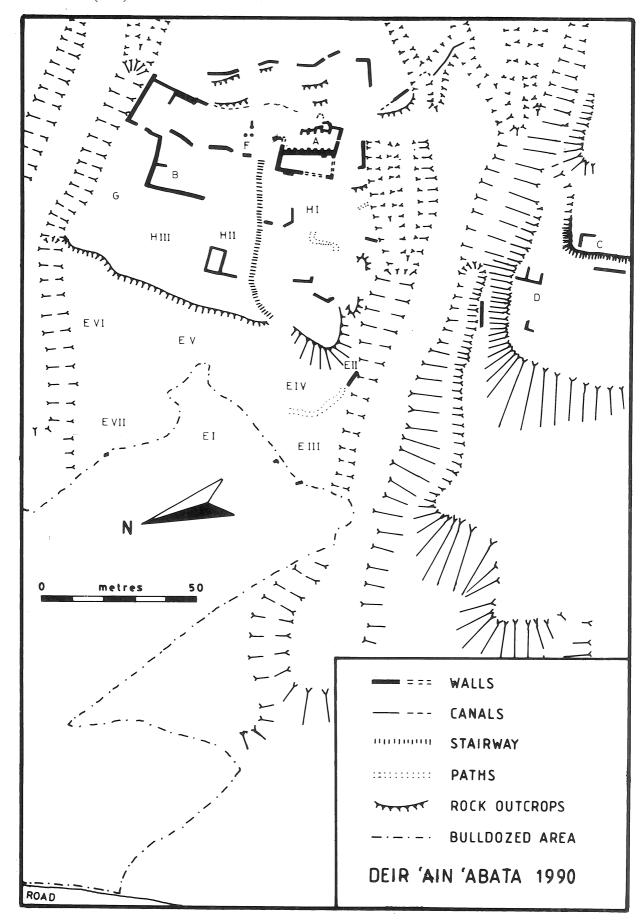


Fig. 3. Plan of the main site and divided areas at Deir 'Ain 'Abaṭa.

B.I. trench was extended by three adjacent 2m x 2m trenches all excavated separately. This not only exposed the complete structure, which measured approximately 1m x 2.5m and stood over 1.5m (Pl. I,2), but also produced more material finds from this rich area. Additional palaeobotanical samples were collected along with animal bone, pottery, metal and glass finds. As in the 1988 season, all the excavated soil was sieved through a 2mm x 2mm mesh on site. This enabled a more precise material retrieval which will be quantified and compared to the material collected on the surface. A study will be made on the percentages of types of wares and fabrics which were discovered.

The complete excavation of the structure in B.I. did not reveal its function; an openning was not evident. Therefore, it was neccessary to dismantle it. First the western end was sectioned and the construction was drawn. The same reddish soil and straw was used to roughly pack unworked stones. As no cavity was evident, the rest of the structure was dismantled and completely removed. No internal structure existed whatsoever and therefore no function could be assigned to this construction. Furthermore, it was clear that the ashy layers previously thought to derive from this structure, were actually present before its construction and also continued to be deposited afterwards. Inspite of the tight packing and the substantial size of the structure, its function succeeded in eluding us.

At a depth of 2.5m natural slope-wash was discovered which signalled the end of occupation levels at B.I. Wall 'B' had a deep foundation trench which again lay on slope-washed pebbles.

The curious structure and the lack of any real floor surface made excavation in Area B.I. enigmatic and architecturally inexplicable. But the material finds discovered in these trenches produced a good stratified sequence which can set a typology at Deir 'Ain 'Abaṭa. A predomenance of Byzantine pottery of the 5th and 6th centuries A.D. continued. Of particular interest was the discovery of more green and brown glazed pottery. The forms were still mostly small, grey cooking pots, though some cups also had thick glaze on their exteriors. On the basis of a chemical test conducted on one sherd from the 1988 season, the major constituent of the glaze is gypsum, CaSO<sub>4</sub>.2H<sub>2</sub>O.<sup>2</sup> In a further experiment by James Mason at the Fine Arts Department, Yarmouk University, Jordan, one grey sherd with glaze was fired in an oxidising kiln at 1180 °C for five hours. The oxidising firing burnt out the reduction firing showing a red body with a well matured shiny brown glaze on the external surface only. This is the first recorded discovery of such glazed pottery on a Byzantine site in Jordan. It is likely though, that other sherds of this type exist on other sites but have not yet been properly identified. It is important to note that this glazed pottery from Deir 'Ain 'Abata is neither "Islamic" lead glaze, nor Sassanian. Instead it has a different nature which may derive from experimentation, perhaps originating from Egypt or under influence of that area.

#### Area F

During the 1988 field season one area was noted for rising higher than any of the surrounding deposits and being the source of the finest architectural pieces and coloured mosaic tesserae. This area lies immediately to the north of Area A and south of Area B. It was designated as Area F but was not excavated until 1990.

The objective of excavating in Area F was to establish whether there was a substantial building there, and if so what its function was. An 11m x 4m trench (F.I.) was openned at the centre of this area. From the first day of excavation many sandstone architectural pieces were discovered along with fragments of white marble and roof tiles. As the excavation continued a series of layers of collapsed blocks and columns complete with their

capitals were exposed (Pl. II,1). It became increasingly evident that under the massive rubble of Area F a large and finely decorated building was hidden. One very weathered sandstone block had an engraved cross flanked by two stylised trees of life (Fig. 4). The capitals varied in style from simple circular carvings, to ornate palmette decorations (Pl. II,2), and Nabataean horned design (Pl. II,1). But perhaps most interesting was a raised relief on a column drum which clearly displayed a large X next to a khanjar-type dagger (Pl. II,1; Fig. 5).

At a depth of over four meters on the eastern bedrock side of the trench, and extending right out to the eroding cliff-side edge, a mosaic floor was discovered (Pl. Three columns, a wall and an III,1). entrance way were still preserved. Resting near the floor amongst the rubble were a number of burnt roof timbers, several fragments of talc/soapstone colonettes beautifully adorned with crosses and stylised vines (Pl. III,2), two early Abbasid lamps (Pl. III,3, right) and a number of pottery sherds, including fine Nabataean painted wares. The mosaic floor itself had an ornate, though repetative geometric design with no evident inscription or figurative representations. It must be taken into account though, that only a limited portion of this floor has been uncovered, much of which has also been destroyed at the western cliff-side edge.

A red painted inscription was also found on one architectural sandstone block in this area. The text is almost complete and is written in Byzantine Greek. It is a prayer invoking Saint Lot to bless three persons.

#### Area J

During the survey north of the main area excavated at Deir 'Ain 'Abaṭa, seventeen sites were identified which were largely unrelated to the settlement (Fig. 1). Fourteen of these consisted of round and oval vaulted cairn tombs with associated pottery belonging to the late Middle Bronzeearly Late Bronze Age. The other three

were different structures of particular interest on their own. After being planned and assigned numbers a surface collection was conducted at all seventeen sites and the areas in between them.

- J.I. cairn tomb, disturbed, MB-LB and Byzantine pottery.
- J.II. cairn tomb with wall/platform, disturbed, MB-LB pottery.
- J.III. cairn tomb, disturbed, MB-LB pottery.
- J.IV. cairn tomb, disturbed, MB-LB pottery.
- J.V. cairn tomb, slightly disturbed, no pottery.
- J.VI. cairn tomb, undisturbed, no pottery.
- J.VII. cairn tomb with wall/platform, disturbed, MB-LB pottery.
- J.VIII. cairn tomb, disturbed, MB-LB pottery.
- J.IX. cairn tomb, disturbed, MB-LB pottery.
- J.X. cairn tomb, undisturbed, no pottery.
- J.XI. cairn tomb with wall/platform, undisturbed, no pottery.
- J.XII. cairn tomb with wall/platform built into rock out-cropping, disturbed, MB-LB pottery.
- J.XIII. cairn tomb, undisturbed, no pottery.
- J.XIV. cleared field associated with main Byzantine site.
- J.XV. building measuring 4.5m x 15.3m x 2.8m, Chalcolithic pottery.
- J.XVI. six graves aligned east-west, walls, Nabataean pottery.
- J.XVII. cairn tomb with wall/platform, double chambered, disturbed, MB-LB pottery.

A well preserved bronze coin of emperor Trajan Decius (249-251 A.D.) was found on the surface to the north-east of J.III. (Fig. 6).

## **Summary and Conclusions**

The survey work conducted during the 1990 season at Deir 'Ain 'Abaṭa produced

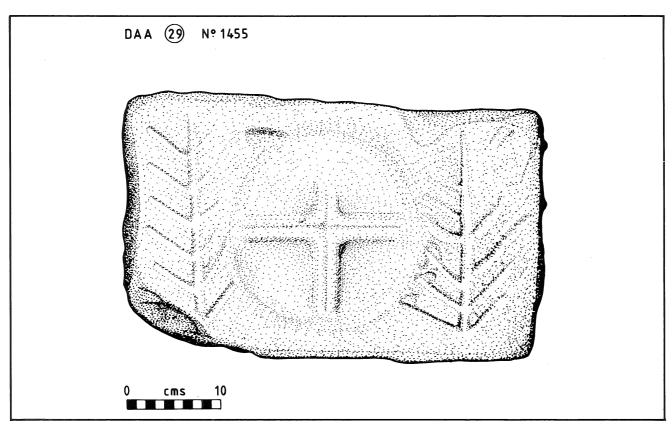


Fig. 4. Sandstone block with an engraved cross flanked by two stylised trees of life found in Area F.I.

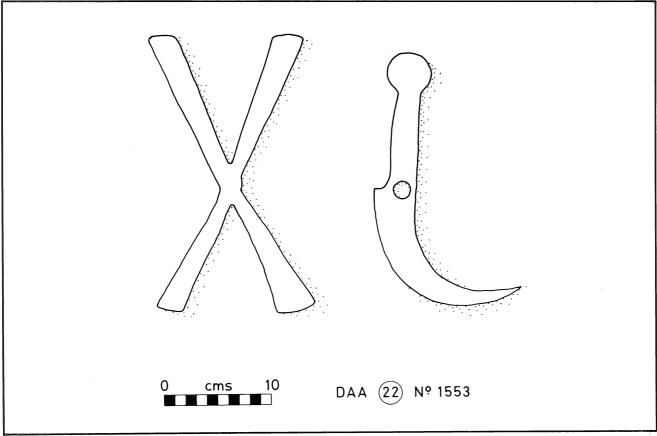


Fig. 5. A raised relief of an 'X' and a khanjar-type dagger from a sandstone column drum found in Area F.I.



Fig. 6. Bronze coin of emperor Trajan Decius (249-251 A.D.) found on the surface north-east of J.III.

the first complete and detailed contour map of the site, its environs, topography and archaeological features. A further surface collection added to our knowledge of the main historical site and identified several other structures belonging to the Chalcolithic, Bronze Age and Nabataean periods.

Investigation and excavation of the northeast part of the reservoir (Area A) not only added to the architectural plan of the building but also helped us understand the catchment system from a complex of plastered water channels above.

The round stone-built structure in Area B could not be explained inspite of its dismantlment. The full depth of deposit was established though no clear floor surface was found. Still, the material which was discovered from B.I. will be an invaluable corpus to reconstruct the economy and date of the site.

The highest rising surface area at Deir 'Ain 'Abaṭa, designated as Area F, was most likely a Christian religious building

belonging to the Byzantine period and being re-occupied in the early Abbasid period (8th-9th centuries A.D.) with the same function. From an inscription discovered in this area, it is possible to identify this site as Agios Lot as depicted on the 6th century A.D. Madaba mosaic map.

## The Staff

The excavation team consisted of Emile Massa'deh, Department of Antiquities representative; Eddie Moth, surveyor/draughtsman; Benjamin Churcher, Area B supervisor; Jodie Benton, Area F supervisor and objects registrar; Ariadne Sakali, site assistant; Margaret O'Hea, glass specialist and Alan Hills objects photographer; additional volunteers were Hugh Strickland, Peter Guest and Dawn Enright; locally hired workmen included Mazen Shu'ar, Mohamed Shu'ar, Yosef Hashoush, Ibrahim Hashoush, Mohamad Hashoush, Mohamad Mamdouh Hashoush and Amjed Hashoush;

the project was directed by the author.

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ADAJ XXXIV (1990) K.D. Politis — Pl. I



1. Eastern side of the reservoir (Area A) with arch stubs attached to the conglomerate bedrock. (Photo: K.D. Politis).



2. Structure in Area B.I. of rough stones packed together with red clay and chaff. (Photo: K.D. Politis).



 Area F.I.: Column drum with raised 'X' and khanjar-type dagger, next to a collapsed column with a Nabataean horned capital. (Photo: K.D. Politis).



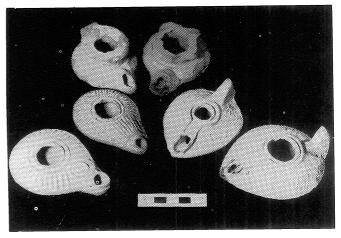
2. Capital with palmette decoration from Area F.I. (photo: K.D. Politis).



1. Southwestern section (F.I.) of the mosaic floor of the church. (Photo: K.D. Politis).



2. Detail of a soapstone colonette adorned with a 3. Oil lamps from Areas B.I. and F.I. cross and stylised vines. (Photo: A. Hills).



(Photo: A. Hills).