

THE 1992 SEASON OF EXCAVATIONS AND THE 1993 SEASON OF RESTORATIONS AT DEIR 'AIN 'ABAṬA

by
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EXCAVATIONS AT DEIR 'AIN 'ABAṬA 1992

Introduction and Objectives

The fourth season of excavation at Deir 'Ain 'Abaṭa in the Ghor eṣ-Ṣafi (Figs. 1, 2) was conducted from September to November 1992. It was planned as a final season on the site and therefore the emphasis was on concluding work and completing documentation in preparation for final publication.

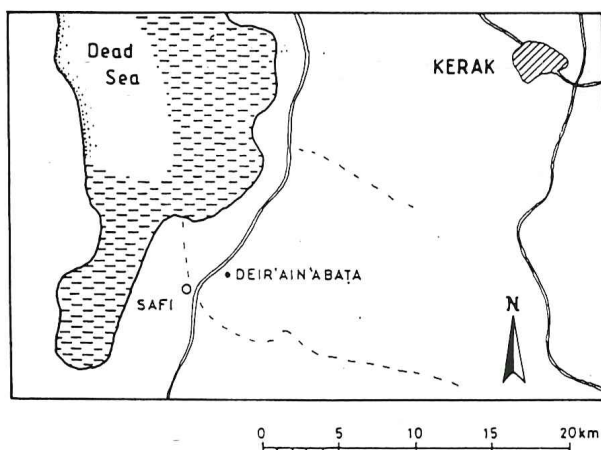


Fig. 1. Location of Deir 'Ain 'Abaṭa.

The main objectives for the 1992 season were to complete the top plans and contour mapping of the entire site; complete excavations in Area F.III (the cave), Area F.I (the north aisle) and Area F.II (in the chancel depression); and open two new areas, one immediately north of Area F, designated Area K, and Area J.XI (a Middle Bronze Age cairn tomb) several hundred metres north of the main site. Work also concentrated on conserving, drawing and photographing objects from all seasons in an effort to complete the onsite work and set up a permanent exhibition at the Karak Museum. Finally, a proposal to develop Deir

'Ain 'Abaṭa as a touristic site was made to the Ministry of Tourism and Antiquities.

Area K

Area K was the largest excavated area during the season's work. It was originally thought that the monastery refectory should lie in the immediate vicinity north of the basilica (Area F). During our excavations in Area K, a number of rooms and structures were revealed which were related to domestic activities connected to food preparation and dining (Fig. 3; Pl. I, 1).

Area K was divided into two sectors, the upper K.I, and the lower K.II. The first consisted of two blocked rooms. The higher room was built just below the water channel which flowed above the entire site. It had a ṭabun-type bread oven in it. The second was only partially excavated in the interior, but its courtyard which was built of cobbles and adobe, was completely cleared. Byzantine cooking pots and jugs were found amongst the ashy debris, mixed with animal bones and even some large pieces of chicken egg shells, all which allude to cooking activities.

Area K.II was separated from K.I by a three metre high wall. It seemed to be divided into two long rooms, but the central and lower parts had been badly disrupted in antiquity and the exact layout was unclear. Furthermore, excavation was not completed in this area.

One of the main features of K.II was a large oven three metres in circumference (Pl. I, 2). Immediately next to it was a large basalt millstone set on a bench. This bench ran right along the entire length of the room and was opposed by one half its length on the other side. The floor in between was

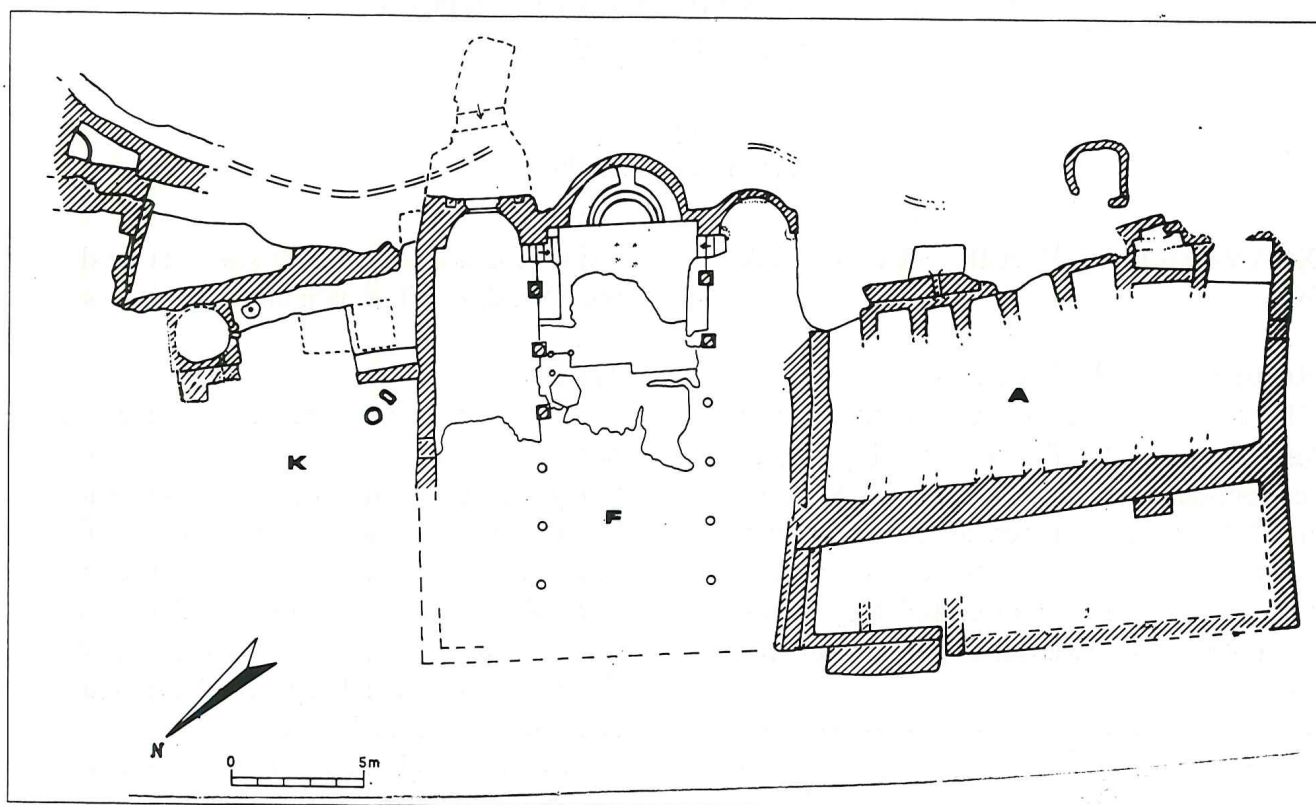


Fig. 2. Plan of the excavation areas at Deir 'Ain 'Abaṭa.

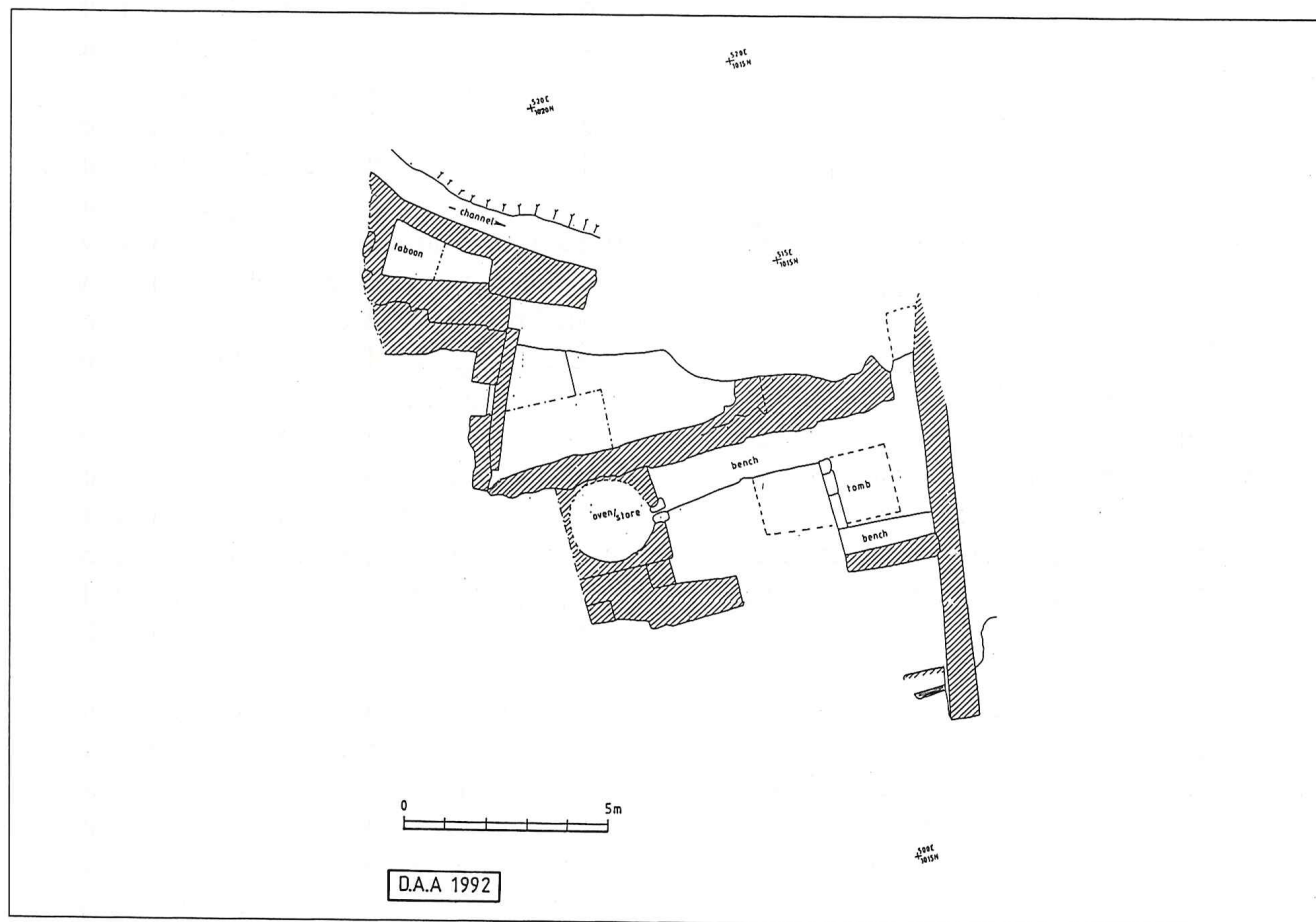


Fig. 3. Deir 'Ain 'Abaṭa: Area K.

largely robbed out of its flagstone surface. In a sondage at the centre of this room we discovered a vault with at least ten interred individuals. One cover slab was removed to photograph the tomb, but it was re-sealed without being excavated (Pl. II, 1, 2). No objects or other finds were evident. In the far south-eastern corner of K.II was a blocked, possibly "secret" passageway into the cave.

The second room on the west side was even more badly disturbed. Two basins were discovered, one rectangular of sandstone with a glass stopper down one side, and the second circular of plaster but truncated in antiquity so that we could not distinguish its size and height. Both of these curiously lay on a surface of red soil and thousands of fragments of painted and inscribed wall plaster (much of which were collected). A sondage was made in this area which revealed a very deep foundation trench of the north wall of the basilica of Area F.III. An *in situ* joist beam was also found running into the wall (Pl. III, 1).

Area F

The north wall of the basilica was entirely exposed for the first time, which completed our excavations in Area F.I. The mosaic floor showed the same geometric pattern continuing up to the wall except for the western end, which ran into the wall and proved that the wall was rebuilt to block an entrance into Area K.II (Pl. III, 2).

Work was also carried out in Area F.II, in the chancel in a depressed section of the mosaic floor. Careful excavation revealed more fragments of the mosaic floor which had slumped so badly that they were almost vertical in places. These were recorded and lifted. Below was the conglomerate mountain bedrock on which the basilica was skillfully built. This area was extended to include the robber's trench immediately adjacent, which had exposed three *in situ* arches below the floor (Pl. IV, 1). Excava-

tion here and to the north revealed a plastered water channel coming from the direction of the cave (F.III) and a deep cistern (Pl. IV, 2). We excavated the cistern whose walls were thickly plastered with hydraulic cement to a depth of over four metres. Work at this point was discontinued due to dangerous conditions. The entire area was then filled in to the level of the *in situ* mosaic floor above.

Perhaps the most important, and certainly the most exciting area excavated in 1992 was the cave (F.III). There we began by uncovering the entire floor of the Byzantine/Abbasid period. The plain mosaic floor entrance unearthed in 1991 was followed by two steps made of re-used sandstone blocks, leading into a simple rectangular room with plastered sides and white marble slab flooring (Pl. VI, 1). There was no evidence of this room being a tomb or store-room. On the northern side of the cave, where there was a gap of any type of flooring, we dug to a two metre depth. Immediately below the mosaic floor level we found Roman pottery. Below this a wall associated to a rough pebble surface was unearthed. On this surface lay a complete jug, a dipper cup and several crushed drinking bowls. These belong to the Early Bronze Age I period (EB IB, Pl. V, 2). Below this level some flints were recovered which may belong to a much earlier period. Amongst the soil was also a number of freshwater mollusc shells which indicate that the cave was once a spring source itself.

Area J

The final excavation was carried out in Area J.XI. This was a cairn tomb with a rectangular platform built around it measuring 5m x 10m (Fig. 4; Pl. VI, 1). Although it seemed undisturbed from the surface, it was in fact robbed in antiquity and the structure had collapsed inwards crushing the two skeletons as well as the objects inside. Still, we were able to distinguish an

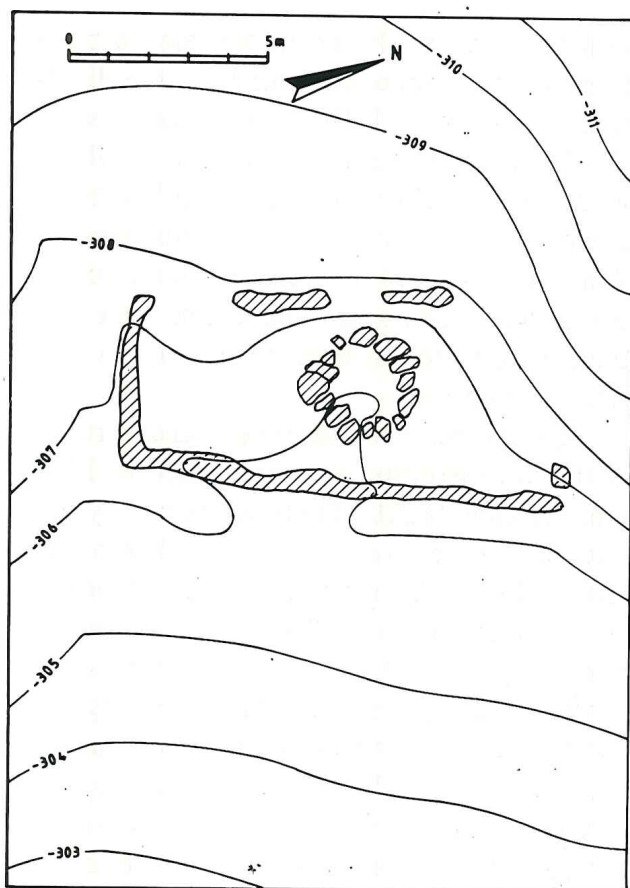


Fig. 4. Plan of the excavated MBII cairn tomb, Area J.XI.

east-west orientation of one of the bodies with the head laying east. the burial goods consisted of six complete and five fragmentary Middle Bronze Age II pots (Pl. VI, 2), a copper fibula (?) fragment and a number of roughly cut shell and stone beads, presumably from one necklace (Pl. VII, 1). Of particular interest were five lunate micro-liths also found in the burial tomb.

Summary and Conclusions

Area K immediately north of the basilica could be identified as the refectory of the monastery with adjacent rooms and structures related to it. The fact, though, that the surviving north wall of the basilica seals the entrance way into the refectory (dated to AD 606 by the mosaic pavement in the north aisle) leads to an important hypothesis: If the chancel and nave which belong to the later construction of the basilica (dated 691 by the mosaic pavement in the nave)

are contemporary to the north wall of the basilica, then the refectory, and probably the entire monastic complex, was not in use after the late seventh century. The lack of stratified pottery later than the Byzantine period outside the basilica and reservoir seems to confirm this theory. Furthermore, the general disruption of the refectory area in antiquity indicates that its walls were used as a source of building stones for the later extensions of the basilica. Excavations in the basilica below the mosaic pavement and in the cave led to similar conclusions of the two main building phases.

The cave in the north aisle of the basilica proved to be nothing more than a rectangular room floored with marble. It had no apparent function. There is no reason why it could not have been presented to pilgrims as the actual place where Lot took refuge after the destruction of Sodom.

The cairn tomb in Area J.XI belonged to the Middle Bronze II period, confirming the scatters of similar pottery sherds discovered at similar nearby tombs. It contained two individuals and eleven pottery vessels along with many beads of shell and stone.

Extensive conservation and documentation work was conducted during the 1992 season. All the mosaic floors were completely stabilised and made ready for either removal or *in situ* preservation. A number of walls were also stabilised with lime mortar. All the objects were treated and made ready for museum exhibition.

A comprehensive photographic record was completed of all the objects and the entire mosaic floor in detail. This will be of particular importance for restoration.

The contour map including all the areas at Deir 'Ain 'Abaṭa was completed and the site top plans were re-checked and finished, (Figs. 5, 6). All the objects were also drawn, checked, and some re-drawn to coordinate the styles for final publication.

The permanent exhibition on the site established in 1991 was improved. The *ambo*

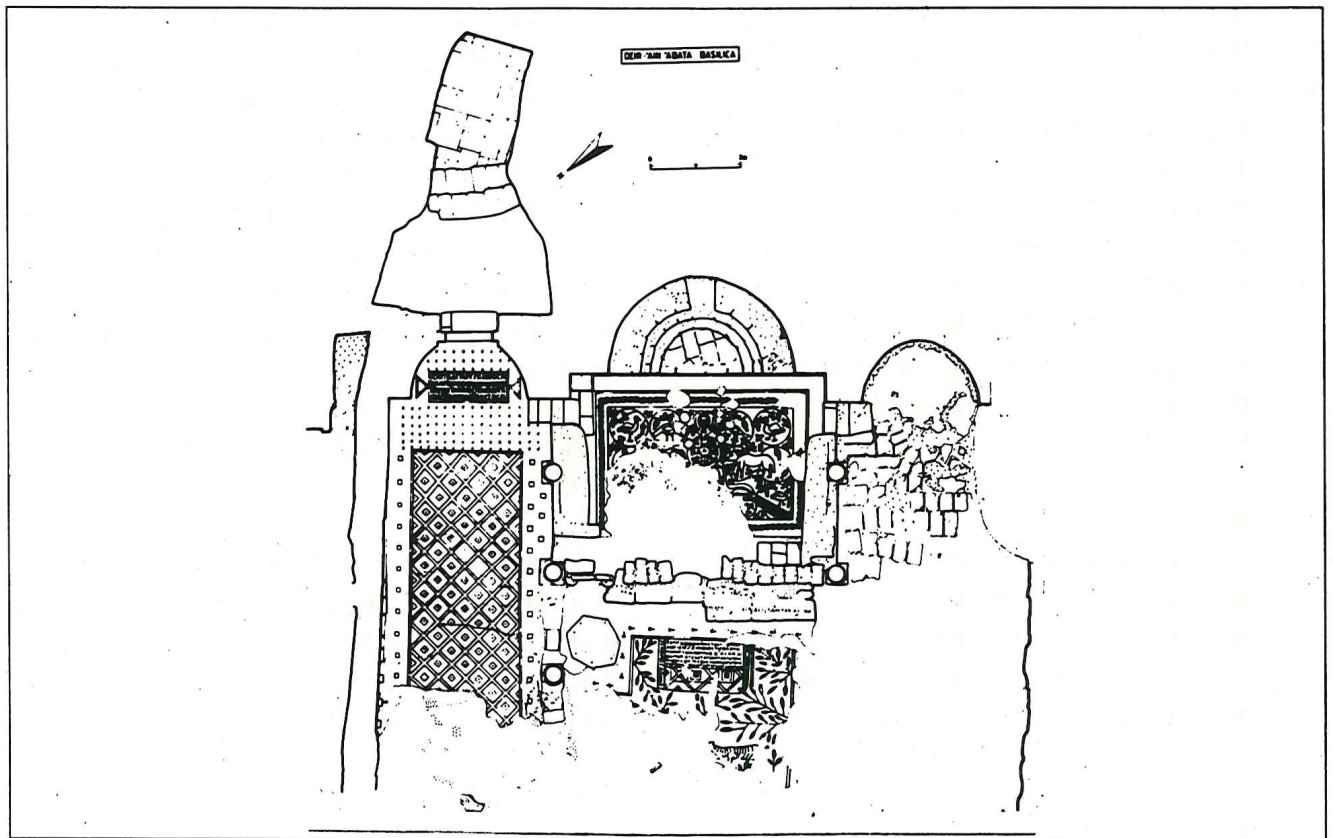


Fig. 5. Completed top plan of basilica, Area F.

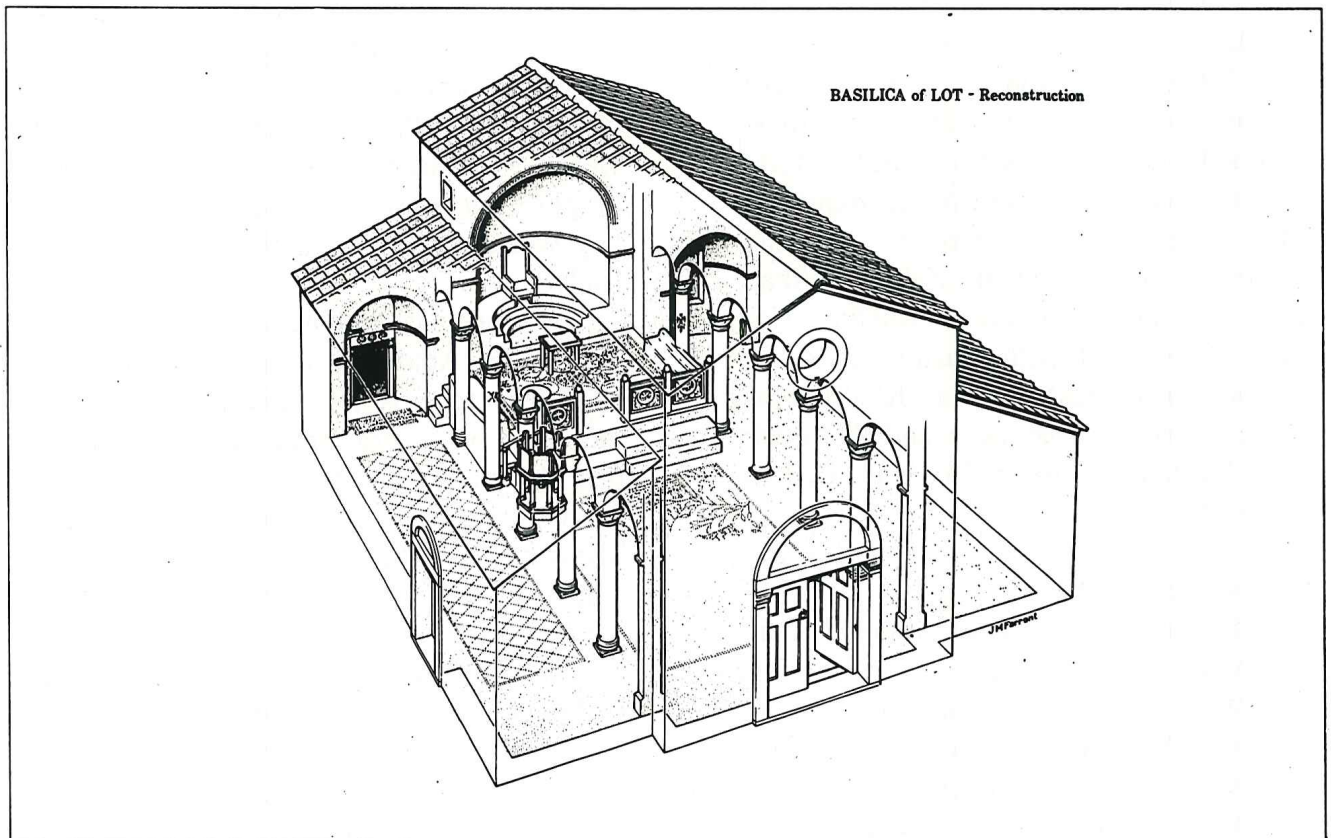


Fig. 6. Reconstruction of the basilica, Area F.

was resurrected on a metal frame. The largest sections of the chancel screen were also put on display in a made-to-order box.

Finally, the proposal made to Ministry of Tourism and Antiquities to develop Deir 'Ain 'Abaṭa as a touristic site was accepted and included in the 1993 budget of Jordan. Plans for a road to the site to be constructed by the Ministry of Public Works and Housing were begun, and a date to begin the restoration project was set for mid-February 1993 (see below).

The Staff

The excavation team consisted of Nabil Baqa'ain and Hakim Mahmeed, Department of Antiquities representatives; Eddie Moth, archaeologist/surveyor; Mark Whyman and Isabelle Ruben, Area K supervisors; Robert Schick, Area F.III supervisor; Jad Al-Younis, site assistant; Dean Sully, conservator; Jim Farrant, illustrator; Tony Milton and Trevor Springett, photographers; and was also joined by Chris Entwistle who assisted in post-excavation work. Locally hired workmen included Ibrahim Muslim Hashoush, Mohamed Ali Hashoush, Maher Salman Hashoush, Mousa Ahmed Maradat, Moussa Muslim Maradat, Mohamed Daoud Hashoush, Majid Sulieman Hashoush, Nassar Salman Hashoush, Jafar Awadd Zahran, Jihad Afash Hashoush, Samieh Muslim Hashoush, Zohedi Muslim Hashoush, Robin Mohamed Hashoush, Taha Khalil Hashoush, Sabri Ali Naouashe and Abdullah Hamed Hashoush. The project was directed by the author.

Acknowledgements

The fourth season of excavations at Deir 'Ain 'Abaṭa was sponsored by the British Museum in London. Additional support came from the Ministry of Foreign Affairs of Greece, the Palestine Exploration Fund, the Society for the Promotion of Byzantine Studies, Biotrek S.A. and Jacob Suchard/

Pavledes S.A. Thanks are also due to the Jordan Valley Authority for allowing the staff to use the resthouse at Mazra'a and for surveying equipment, and to Aramex for providing transportation within Jordan.

The author of this report is grateful to Dr. Safwan Tell, Director-General of the Department of Antiquities for granting permission to continue excavations at Deir 'Ain 'Abaṭa.

RESTORATIONS AT DEIR 'AIN 'ABAṬA 1993

From February to May 1993, a restoration project was begun at Deir 'Ain 'Abaṭa sponsored by the Ministry of Tourism and Antiquities of Jordan. Additional support came from the British Museum, Royal Jordanian Airlines, the Jordan Valley Authority and Aramex.

The objective of the project was to organise and initiate the conservation, preservation and consolidation of Deir 'Ain 'Abaṭa in order to develop it as a touristic site. Minimal archaeological excavations were also conducted primarily in the course of securing pathways, planning a road and clearing the spring. Meanwhile the photographic, illustration, conservation and survey work continued on the archaeological finds.

The most important work to develop Deir 'Ain 'Abaṭa for tourism is make the site more accessible. After an analysis of the slope by several architects and surveyors, a plan was made to construct a road leading up to the ancient ruins (Fig. 7). The Ministry of Public Works and Housing will carry out this job. Meanwhile a pathway was made up from the proposed road and car park by cutting into the mountain bedrock and cementing in roughly shaped local stones. The aim was to make a comfortable and durable stairway which would blend into the natural landscape.

The second most important work which

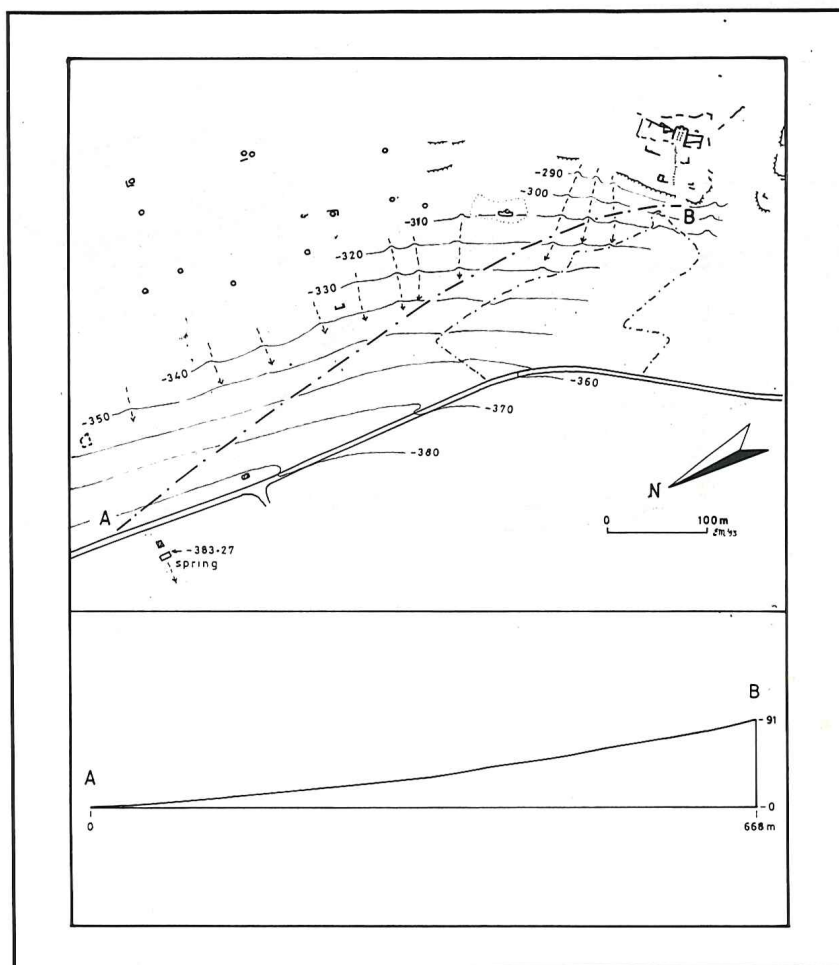


Fig. 7. Plan of the ancient ruins of Deir 'Ain 'Abaṭa and proposed road.

must be carried out at Deir 'Ain 'Abaṭa is to save the ancient structures from further erosion and damage. A plan was made to build a long protective wall running the entire length of the monastery complex along the ancient protective wall remnants. This will be made of galvanised gabions covered by cement and camouflaged by local stones. This wall is not only important for the protection of the ancient structures but also to make the site safe to visitors, as well as to those working at it. In preparation for this wall the entire slope was cleared of loose rubble. The actual construction of the wall, though, cannot be made until a road is built up to the site to bring materials. The limited budget in 1993 also hindered its construction.

General consolidation of all walls was continued with an emphasis on training the

more skilled workmen to do the job. A tested mixture of lime mortar was used.

Work also continued on the stabilisation of the mosaic floors in the basilica. A plan was made by the mosaic expert to lift and repair a number of sections. It was begun in the floor of the cave entrance which is in the best condition. Over the following two years the central mosaic paving in the nave will be lifted and reset.

A replica of a Byzantine perloined gabled wooden roof covered by tiles has been planned as a permanent shelter for the basilica and its mosaics. Since the front side of the basilica on the west has collapsed downslope, a complete section of this roof structure will be visible. The open end towards the west will have a view of the Dead Sea (Sea of Lot), Jabal Uṣḍum (Sodom) and Ṣafi (Zoar).

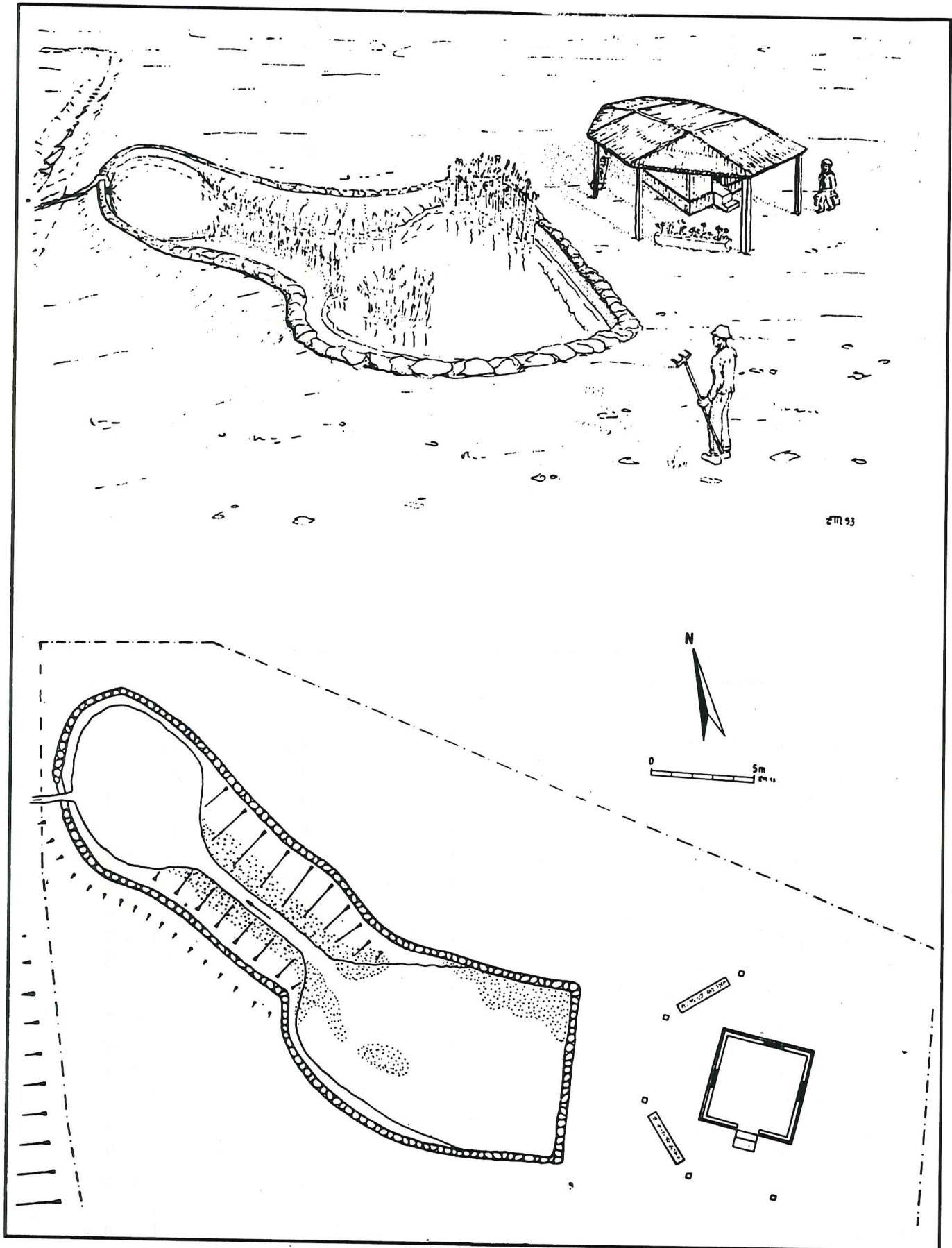


Fig. 8. Plan of the spring development into a small environmental park.

Perhaps the most significant natural feature at Deir 'Ain 'Abaṭa is the spring: Two species of freshwater fish, as well as three of snails, one of crab and a number of aquatic plants have survived there since the days when the "Dead" Sea was a living lake. Agricultural developments and irrigation projects have seriously threatened such rare communities. As a part of our touristic development of Deir 'Ain 'Abaṭa, we chose to incorporate the spring, making it a small environmental park which would also serve as a picnic/rest place. The entire area was cleared of rubbish and the pools of the spring were enlarged (Fig. 8). This will have two effects: it will increase the population of the species, and will also increase the size of the actual fish. From our archaeological analyses we have found that the ancient human populations at Deir 'Ain 'Abaṭa ate such freshwater fish species. There may also be potential for modern fish farming here.

With the drying up of the Azraq oasis, the bird sanctuaries have been eradicated in the eastern desert. The result has been a change in the bird migration routes through the Jordan Valley. We have noticed this at Deir 'Ain 'Abaṭa and propose to encourage birds on migration to use the spring as a small refuge.

Finally, a temporary carpark and store/guard house was made at the base of Deir 'Ain 'Abaṭa. The house may serve as a visitor's centre and museum in the future.

The staff during the first season of restoration work at Deir 'Ain 'Abaṭa included Eddie Moth, archaeological architect/surveyor; Jad Al-Younis, environmentalist

and executive assistant; Stefie Chlouverakis, archaeological conservator and mosaic specialist; Isabelle Ruben, archaeologist; Jim Farrant, architectural and finds illustrator; Amani Malhas, architect; Trevor Springett, photographer; Maher Khouri, structural engineer; Helen Nicolson, archaeologist; Alan Clapham, archaeobotanist; Yannis Meimaris, epigraphist; Theodoros Loukeris, mosaic conservation assistant and Rachael Sparks who helped in registration. The Ministry of Tourism and Antiquities was represented by Jafar Shahadeh and Nabil Baqa'ain. Jane Taylor was responsible for aerial photography with the help of the Royal Jordanian Airforce (Pl. VIII). Local workmen from Şafi, without whom none of the work would have been possible, included many from previous archaeological seasons.

The restoration project at Deir 'Ain 'Abaṭa was directed by the same director as the archaeological project and author of this report. He is grateful to H. E. Yanal Hekmat, Minister of Tourism and Antiquities of Jordan and Mr. Nasri Atalla for initiating the restoration project and providing constant support, and to Dr. Safwan Tell for granting permission to conduct limited archaeological rescue excavations.

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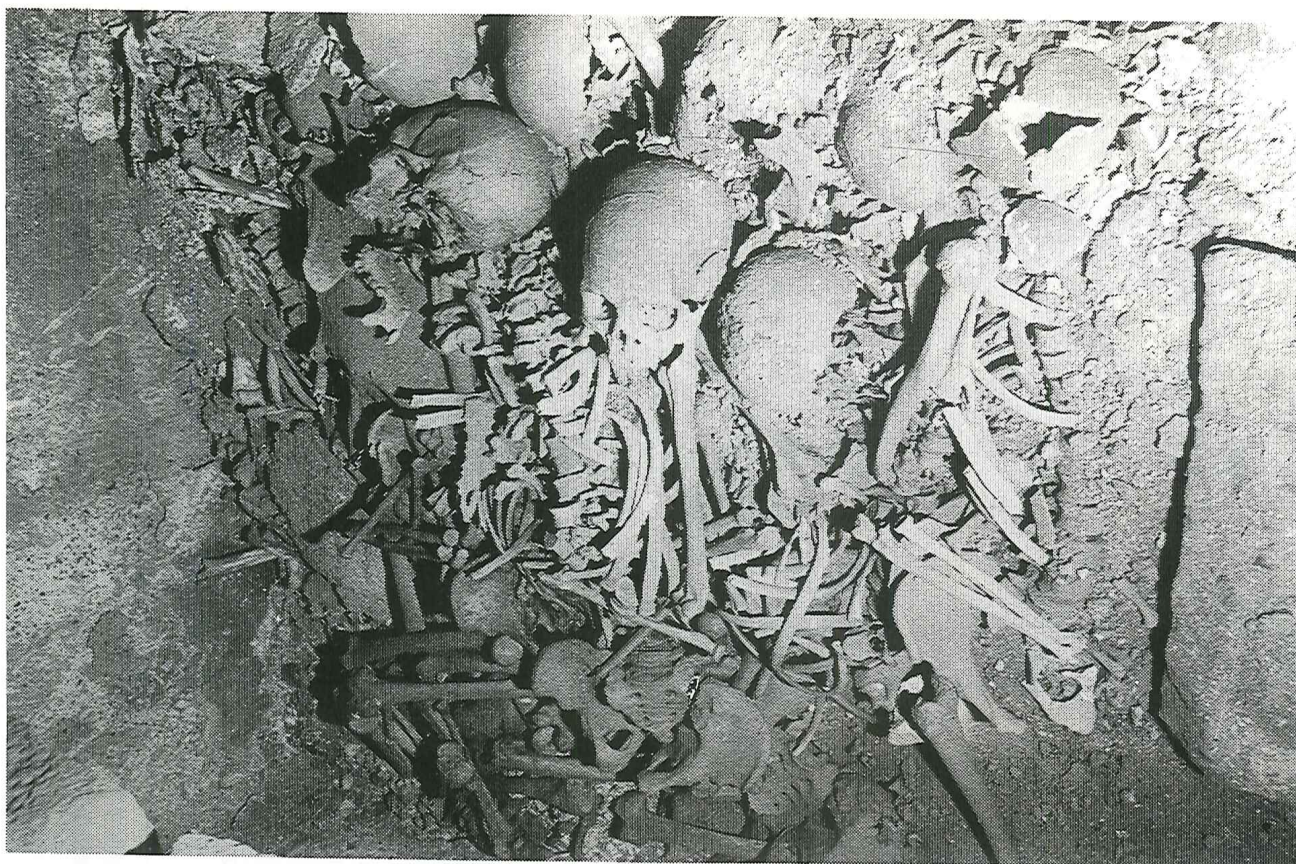
1. Area K: K.II in foreground with oven and refectory area (Photo: T. Springett).



2. Oven in Area K. II (Photo: T. Springett).



1. Burial chamber in Area K. II (Photo: T. Springett).



2. Interned monks' skeletons in the burial chamber, Area K. II (Photo: T. Springett).



1. North side of the north basilica wall where entrance originally was. Note the disrupted wash basins, floor slabs and wooden joist still *in situ* (Photo: T. Springett).



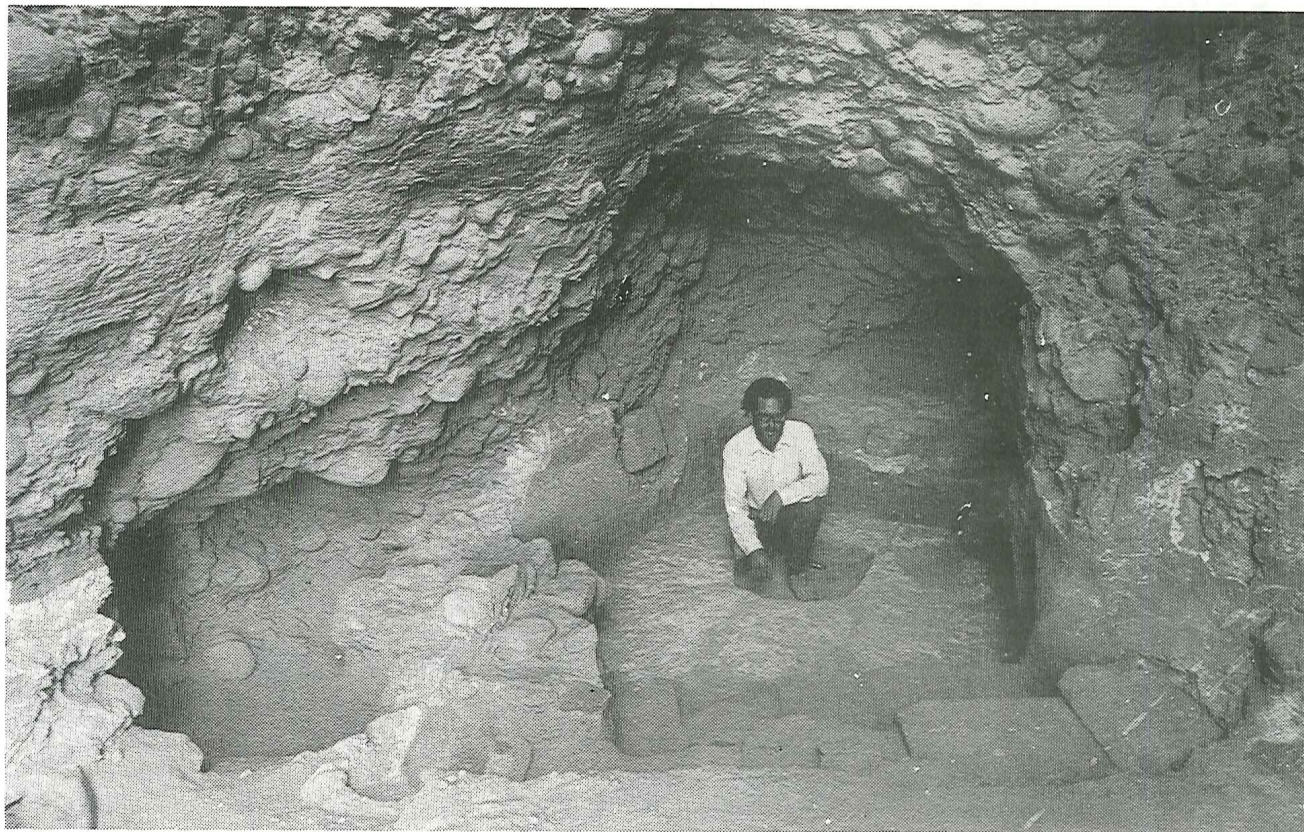
2. Sealed entrance from the north aisle of the basilica, Area F.I, to the refectory, Area K.II. Note the stepped diamond and star design on the mosaic pavement which is partially covered by a later wall (Photo: T. Springett).



1. Supporting arches under the mosaic floor in the chancel, Area F.II (Photo: T. Springett).



2. Cistern and channel (on upper right) in the chancel, Area F.II (Photo: T. Springett).



1. Byzantine-Abbasid level of the cave, Area F.III (Photo: T. Milton).



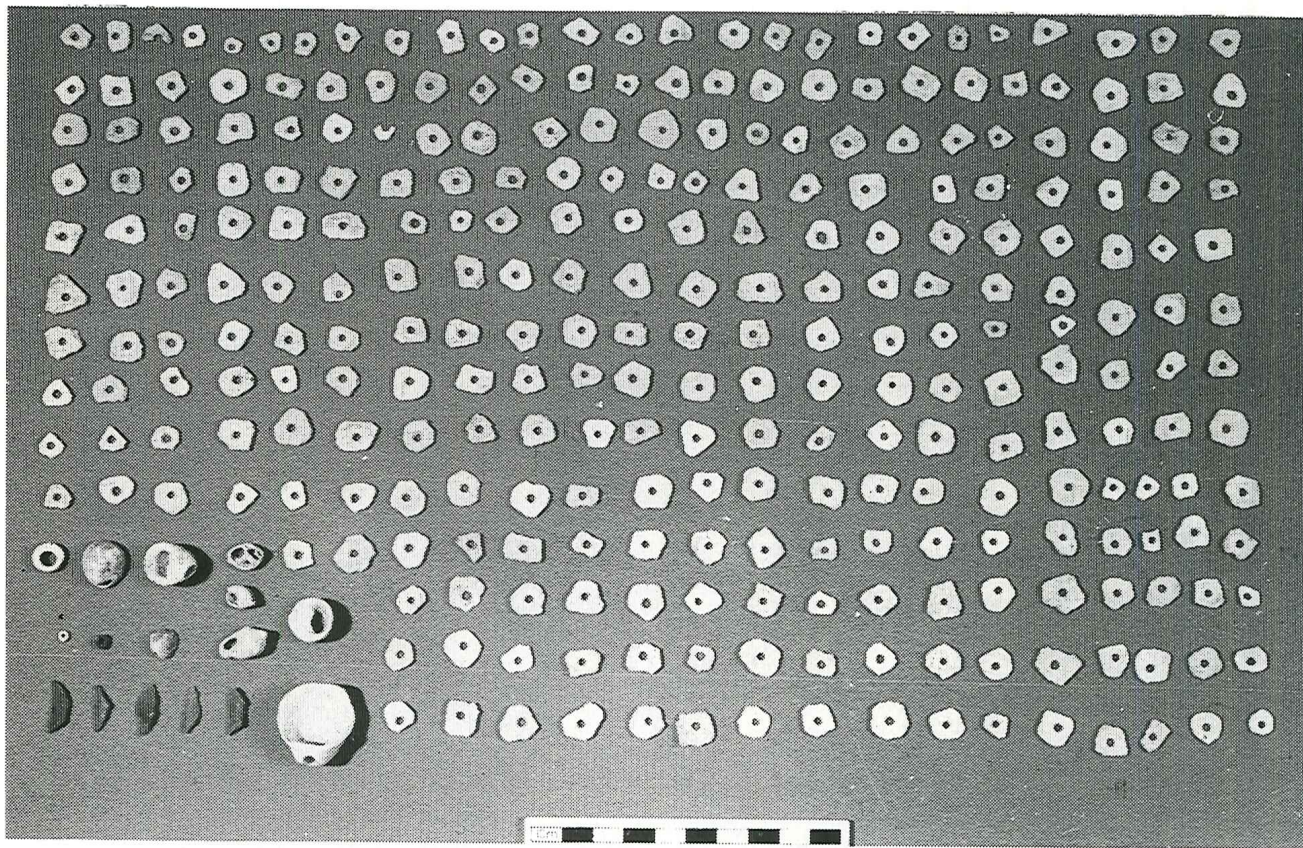
2. Early Bronze Age IB pottery at the base of the cave, Area F.III (Photo: T. Milton).



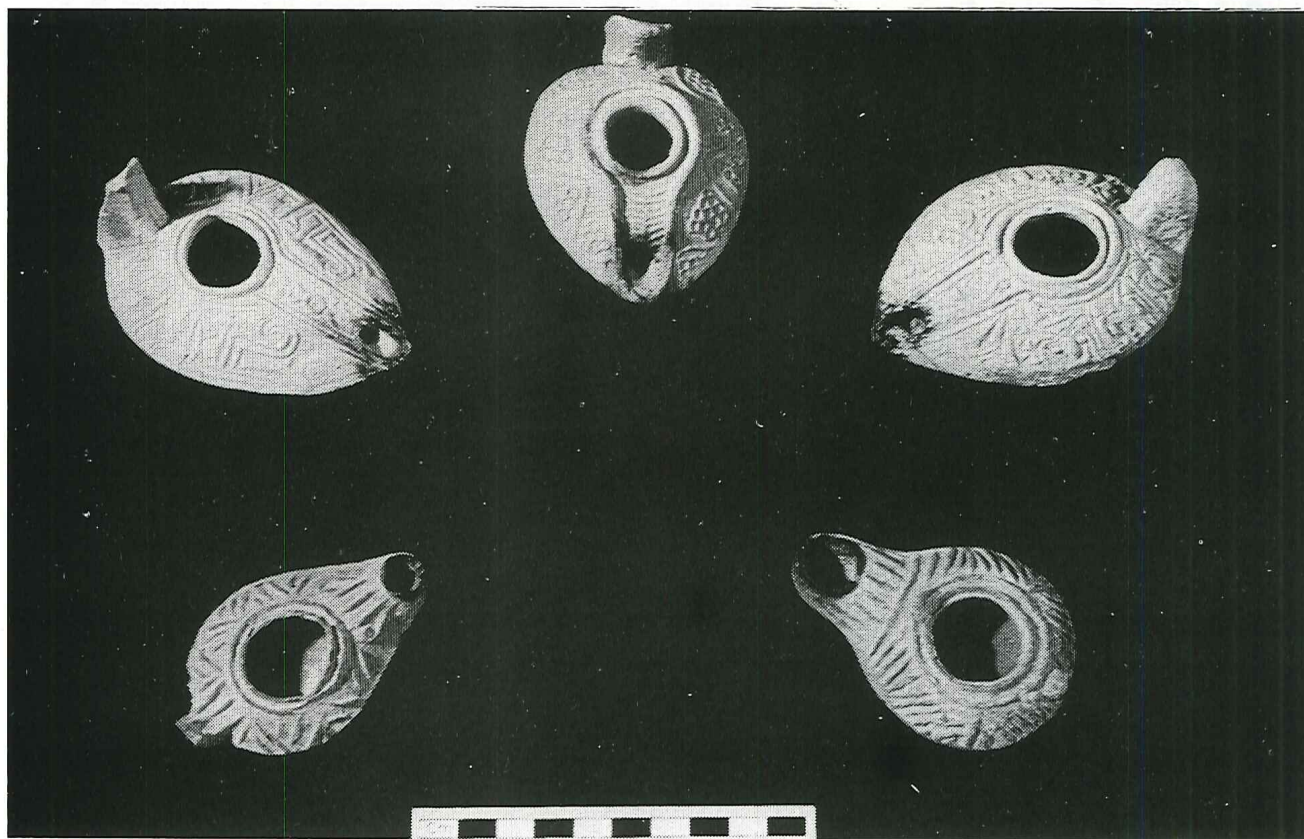
1. Middle Bronze Age II cairn tomb from the south, before excavation, Area J.XI (Photo: K. D. Politis).



2. Middle Bronze Age II pottery from the cairn tomb, Area J.XI (Photo: T. Springett).



1. Shell and stone beads, and lunate flints from the MBII cairn tomb, Area J.XI (Photo: T. Springett).



2. Byzantine and Abbasid period oil lamps from Areas F (on top) and K (on bottom) (Photo: T. Springett).



Aerial view of the monastery of Agios Lot at Deir 'Ain 'Abaṭa, 1993 (Photo: K. D. Politis).