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## ‘Ain el-Gazzareen: Developments in the Old Kingdom Settlement

Anthony J. Mills and Olaf E. Kaper

### Abstract

‘Ain el-Gazzareen, in Western Dakhleh Oasis, has been under excavation for the past four seasons. Initial prospecting at the site showed great promise, which subsequent geophysical surveying enhanced. Excavation confirmed the geophysical results and the 1999–2000 season has revealed a large building with considerable symmetry which may be an indicator of the importance of the site. It has also revealed our first real architectural stratigraphy. Next season should prove particularly important for our appreciation of the Old Kingdom settlement in the oasis.

### Previous Work

In October 1979, Rosa Frey investigated some of the area between Amheida and Mushiya as a part of the walking survey of the Dakhleh Oasis. This was during the initial phase of the Dakhleh Oasis Project’s field programme to ascertain the number and variety of ancient remains in the oasis and each site, as it was found, was given a surface inspection to determine its apparent extent and dated from the artefacts that were collected from the surface. At the same time, a small test excavation was made to assess the depth of fill each the site, the occurrence of any stratigraphy, the sub-surface condition of the site, and the quality of preservation at the site. Frey’s initial assessment of ‘Ain el-Gazzareen was that it was an Old Kingdom town-site covering an area of over 500 x 150 m with an extensive surface scatter of Old Kingdom pottery, flints, sandstone grindstones, and ostrich eggshell. Several mud-brick buildings were located, particularly at the west side of the site. It was given the index number 32/390-K2-2 (Mills 1980, 257–8) in the system utilized by the Dakhleh Oasis Project. Two separate tests were excavated by Frey, close to one another with a resulting description of

architecture and artefactual finds. The survey then moved on and the Project’s interest in the site remained dormant for a couple of decades.

In 1997 it was realized that while the Project had 200 prehistoric sites and approximately 220 sites ascribed to the late Pharaonic to the Roman Period, other than ceramics (Hope 1999, 221–9) there had been little to provide information of a substantial nature, except at the cemetery at ‘Ain Tinghi, about the intervening millennia between the Neolithic and the Roman Periods. To excavate in a settlement site with not such an obviously official capacity but of a date similar to that of the Old Kingdom capital of the oasis at ‘Ain Aseel, it seemed especially useful to make a search amongst the 50 or so Old Kingdom sites indexed by the survey. Eventually, ‘Ain el-Gazzareen was chosen as seemingly the most appropriate site to complement the work of the Institut Français d’Archéologie Orientale team and to present a picture of life in the oasis during the third millennium at the beginning of pharaonic settlement.

As has been explained (Mills 1995, 61–5; Mills 2002a and b), the quantity and quality of surface material on the site, the type of site, its probable connexion with the official capital at ‘Ain Aseel, and the potential of the site to explain so much about the activity of the period in the area, were among the reasons for its investigation. The first two seasons, 1996–7 and 1997–8, were occupied in excavating a bakery structure in a square of 10 x 15 m, and in the recovery and assessment of floral and faunal materials, as well as artefacts, which well demonstrated the nature of the buildings and of the industry in them. Dating the site is mainly based on the ceramics and is at least Dynasty V and VI.<sup>1</sup> There is also a series of seal impressions which help to fortify this dating (see Kaper below and Figures 2 and 3). Surface assessments have now placed the site’s extent at nearly 5 hectares in total, with a maximum width from east to west of about 125 m.

<sup>1</sup> The study of this material under the supervision of Colin Hope commenced in the 2001/2 season and continued in the 2002/3 season. The results will be reported at a later date.

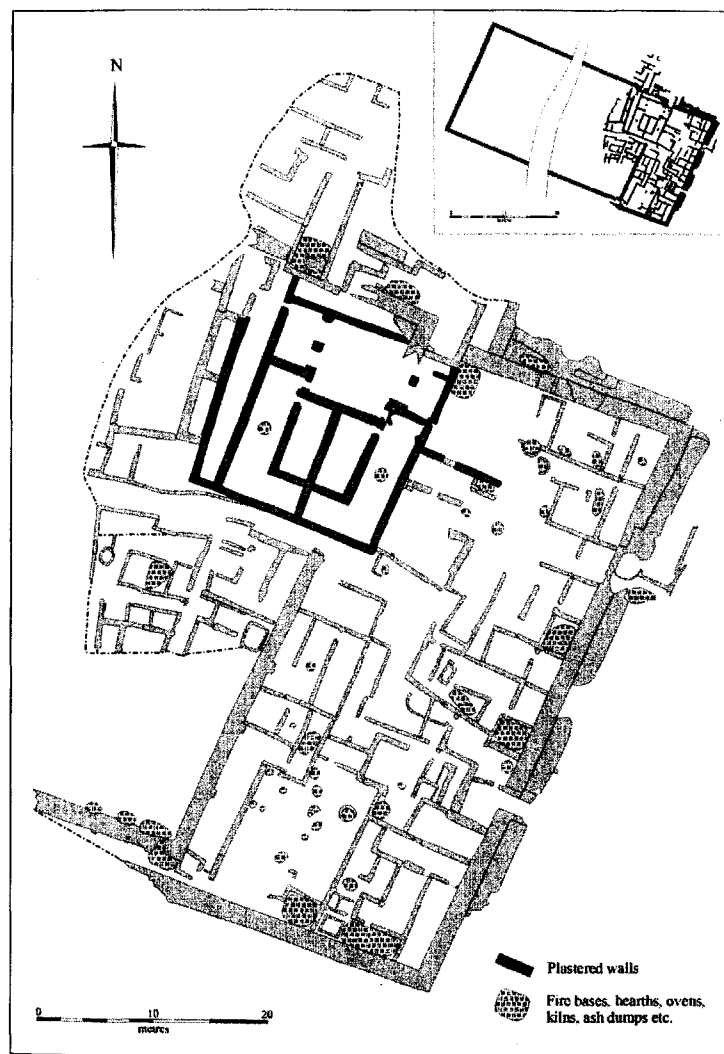


Figure 1 'Ain el-Gazzareen (32/390-K2-2): plan of excavated area.

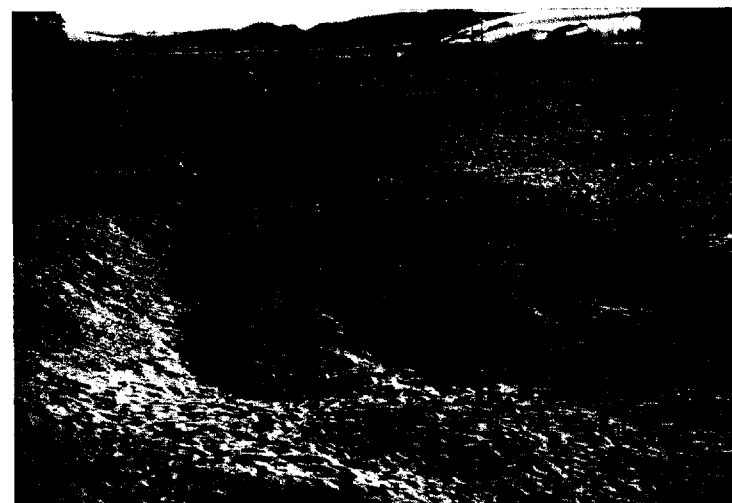


Plate 1 The heavy eastern wall of the enclosure with the series of interior rooms abutting it.

#### Recent Excavations

Work has now been conducted at the site, with the assistance of Richard Mortimer and Natasha Dodwell, in two subsequent seasons, in 1999–2000 and 2000–2001, with interesting results. It was suggested to the writer by Tomasz Herbich, the then secretary of the Polish Centre for Mediterranean Studies, that 'Ain el-Gazzareen would be a good subject for a geophysical survey. It was agreed and he began surveying early in January 2000, together with his colleague Tatyana Smekalova, using a Geoscan fluxgate gradiometer and Overhauser gradiometer GSM-19WG magnetometers (Herbich and Smekalova 2001, 259–62). The results were most satisfying. The survey, in the general vicinity of the previous season's excavations, revealed the presence of a large enclosure, some 55 m from north to south and 125 m from east to west. There appeared to be, under the architecturally-featureless surface, a rectangular structure which contained small architecture as well as traces of burning in many places: perhaps the remains of industrial activity, or simple cooking fires. One other large feature was an internal wall, apparently as heavy as the enclosure wall, running parallel to the outer east wall and some 25 m to its west, and apparently dividing the 'enclosure' into two unequal parts (Figure 1).

These results had then to be tested by excavation, which proved the accuracy of the geophysic's results. In the season following the geophysical survey we excavated along the eastern wall of the enclosure and exposed a heavy

mud-brick wall, with a width of some 3.50 m, together with a series of rooms built against the interior, west, face of the wall (Plate 1). This wall turned westwards at each end and the three walls together formed the eastern end of the great enclosure. These walls were traced to their ends, at a distance of some 25 metres. The western ends of the eastern enclosure walls approach but do not connect with the north and south walls of the larger, western enclosure.

The eastern enclosure would seem to have been a subsequent addition to the larger enclosure as the western wall of the smaller utilizes the east wall of the larger enclosure but does not join it. The ends of the north and south walls are not attached to the western enclosure and do not in fact form an enclosed space but leave openings at both of the western ends. Excavation has largely been with brush and scraping. This serves to disclose wall tops and the upper 30 cm of each space, without disturbing floor deposits. One test of about one metre square was excavated in the corner of the south-easternmost room and disclosed a complete wall height for the enclosure wall corner of 0.75 m. The floor of the room is, of course, above the wall bottom.

The interior is divided by mud-brick walls, generally one brick thick, into nearly fifty 'spaces'. There are 13 of these 'rooms' built against the inside of the eastern enclosure wall (Plate 1), and the remainder across the enclosure. The architecture of this eastern enclosure will not, of course, be completely understood until it has been fully excavated, but it appears to have been constructed in a planned, but rather haphazard fashion. The row of 13

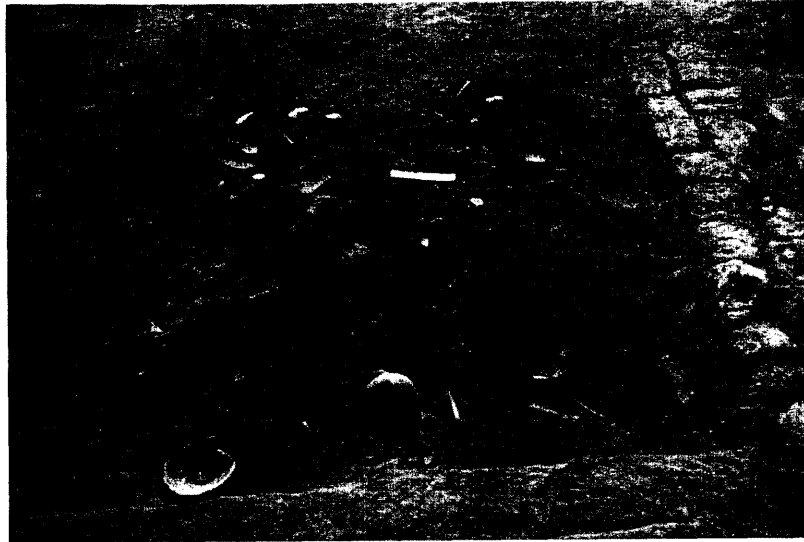


Plate 2 Deposit of ceramics, flints and bone artefacts at a high floor level in Room 51.



Plate 3 Building 'C', showing the southern symmetrical rooms; view from the north.

rooms across the inner face of the eastern enclosure wall have more or less straight walls and right angled corners, but to the west of these lies a much more irregular set of spaces. A few of the spaces are too large to have been roofed and must have been courtyards or open spaces for industrial process or gathering areas. As the plan now stands, access to most of the rooms is uncertain, but may become obvious when excavations are deeper. There are no obvious corridors or access to many of the spaces. There is a large, built entrance gap in the eastern wall, but access is only into a very few rooms. Possibly, there was other access into this eastern enclosure from the west, at either end or via the passage leading eastwards between buildings at the side of the bakery.

There are several features within the eastern enclosure. These include areas of ash deposits as indicated on the plan. The deposit in the rectangular room against the southern wall was particularly dense and thick, rather like that in the bakery area (Mills 1980, 61–5) excavated previously. Other ash deposits are less dense and probably represent cooking or other more domestic fires. Samples have been taken from most of these deposits for botanical analysis by Johannes Walter and virtually all the fuel found in these deposits is tamarisk and acacia. There are also a number of areas where water seems to have affected the soil and deposits. This may have been contemporaneous but could as easily represent activity, human or even natural, after the site had been abandoned. Finally, there are a number of round or rounded pits, up to a metre deep, which also may be post-abandonment. In one of these, a large limestone column element was found, although it seemingly was not *in situ*.

Potsherds of various late Old Kingdom wares have been found in the upper fill of these spaces and, exceptionally, entire vessels (Plate 2). The heavy bread moulds are not common, unlike in the area of the bakery. Chipped stone materials occur, although these are more concentrated in surface deposits, which are the amalgamation of up to two metres of deflation. Objects are rare; the seal impressions that were common in the bakery (Mills 2002b, 28–9) are absent. In a scattered deposit in one room there was a variety of beads in stone and faience, a few bone and copper awls, three complete pottery vessels, one drop-shaped jar and two bowls, seven long bones of a ?goat perhaps collected for preparation into awls, and some chipped stone artefacts (Plate 2). This was an unusually rich deposit. The fill of the area of the eastern enclosure was largely sand, mixed with some ash and soil.

The eastern enclosure abuts the western or main enclosure. The walls of this larger enclosure are some one metre thick and have rectangular buttresses at intervals of up to 3.50 m on the outer face. These buttresses are seen on the eastern, southern and northern segments. The buttresses are small and may serve a decorative function, rather than a structural one. No deliberately-made doorway or entryway has yet been discerned. The eastern wall of this main enclosure has been interrupted. At a distance of 18.2 metres from the south corner, a lane cuts across the

wall and immediately north of the lane is a large building, 'Building C' (Plate 3), which has been built at a level above the top of this wall. At a distance of about 12 metres northwards from the break in the wall, it is resumed, just before a corner at which it turns at a right angle to the west. The geophysical survey results do not indicate any break in this wall and it is expected to be able to trace it at a lower level.

It is the large building which lies atop the eastern wall of the main enclosure and is partly within the area of the eastern enclosure, but mostly within the main enclosure, that is now our main focus. This building is quite different from the rest of the structures seen to date. The building has straight walls with good rectangular corners. The walls are well built and are 1½ bricks wide. The southern part of the structure has four rooms or spaces. There is a symmetry in the internal arrangement of the rooms, with two opposed L-shaped rooms at the outside and two rectangular rooms on the inside. Doorways into each of the two outer rooms are from behind a 'partition' wall on the north, and then the entrance into each of the inner, rectangular room is from the outer L-shaped room adjacent to it. There is no communicating door between these two 'pairings'. To add to the symmetry, there is a round pit, 80 cm in diameter, at the centre of each of the L-shaped rooms. These two pits were identical in size, position, shape, and both contained an ashy fill, although the sides do not display any particular evidence of burning. On all of the walls in this part of the building, there is a heavy, grey mud plaster, up to 5 cm thick. On the western wall of the western room there are traces of a rather thin wash of yellow pigment, and in the entrance at the north into this same room is a thick red coating of paint. A number of large fragments of packed mud with the impression of palm-leaf stems on one side betray the existence of flat roofs on this part of the building. As the mud layer is thick, there may have been a second storey above.

A surface examination of the remainder of the building to the north of these four rooms indicates an open court with two rows of square pillars and buttresses. This gives the structure an even, more formal aspect, with hidden rooms at the southern end and more open spaces towards the north. It is interesting that while the fill of many of the rooms in the eastern enclosure contained potsherds and other debris that might be attributed to a living space, none of the rooms in this Building C contained much artefactual debris at all. In the inner, western room, was a mound of sherds of red polished ware vessels which appeared to have been collected together at the north-eastern corner to tidy up other spaces. There were several column drums, each approximately 20 cm in diameter and about 25 cm high. They are of limestone and each has two opposed flat surfaces, on one of which are traces of red paint, apparently from the painted (?wooden) column that rested on each of them. None of these bases was found *in situ* and none of the four rooms is wide enough to warrant a ceiling support.

It would be premature to offer an interpretation of this structure, until the northern part has been fully examined. However, it is difficult to avoid comparison with the remainder of the architecture on the site. This structure is well and regularly built with comparatively heavy walls of 1½ brick thickness, whereas the other building in the eastern enclosure is less regular and has generally thin walls of a single brick. Within these rooms almost no living debris was found and the rooms' contents were few; some sherds and a few circular limestone column bases of about 25 cm diameter and some 25 cm thick. None of these were *in situ*. In the eastern enclosure there are signs of activity everywhere. The walls are thickly and carefully plastered and there is evidence for decorated wall surfaces, none of which is visible in the remainder of the site. A similar structure has been reported from 'Ain Aseel as a large, symmetrical apartment (Soukiassian 1997, 16). However, that structure is less complex than the one at 'Ain el-Gazzareen.

It is also appropriate to report here that Michal Kobusewicz of the Polish Academy of Sciences in Poznan, has begun an analysis of the chipped stone industry found at 'Ain el-Gazzareen. Intensive pick-up has been accomplished in a 100-metre square on the site as well as collection of large groups, probably representing knapping areas, that have been seen at various places on the site. These collections, as well as excavated materials in the future, will be analysed in order to come to an understanding of the industry at the site. This will be compared with the industry on the contemporaneous Sheikh Muftah sites, and that from other Old Kingdom sites from other parts of Egypt. This is intended to give us a broad and detailed insight into the chipped stone industry of late Old Kingdom Egypt and to provide an example of collection, recording and analysis of the industry throughout dynastic Egypt. With chert and flint so widely available, ancient Egyptians must have utilized the material in an easily-understood industry throughout their history.

The work at 'Ain el-Gazzareen will continue to provide considerable information about the life of the Dakhleh Oasis community, its internal composition and interactions, as well as its relationships with the Nile Valley and with Saharan and other oasis communities of a similar date. So far, it has greatly rewarded the Dakhleh Oasis Project.

(AJM)

#### Preliminary Remarks on the Seal Impressions from 'Ain el-Gazzareen

A total of 45 seal impressions and a few inscribed sealings are currently known from the excavations at 'Ain el-Gazzareen. These impressions provide evidence for Egyptian administrative practice in this part of the oasis, and their interpretation will be largely dependent upon a comparison with the hundreds of impressions found at the oasis' capital at 'Ain Aseel (Pantalacci 1996). Recently, a collection of 164 seal impressions and related material from the *ka*-chapels of the governors at 'Ain Aseel were

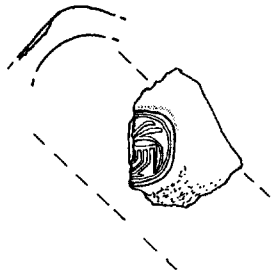


Figure 2 The seal impression with a bee used for sealing a bolt (drawing by B. Parr). Scale 1:1.

published by Pantalacci (Soukiassian *et al.* 2002, 365–74, 385–445). Smaller collections of seal impressions have already been published from the cemetery at Qal'a ed-Dabba and the pottery workshops at 'Ain Aseel, but the recent publication provides the first evidence from the urban area. This comparative material has prompted the following preliminary remarks on the finds from 'Ain el-Gazzareen.

One actual stamp seal was found at 'Ain el-Gazzareen, made of ceramic, and six examples made of this material may be cited from the *ka*-chapels complex at 'Ain Aseel (Soukiassian *et al.* 2002, 385–91). As Pantalacci has noted, this material is unknown for contemporary seals from the Egyptian Nile Valley and there are only a few parallels from Nubia (Soukiassian *et al.* 2002, 385, citing Wiese 1996, 99). The shape of the stamp seal from 'Ain el-Gazzareen is different to those found at 'Ain Aseel, and its study is continuing.

The majority of the seals employed at 'Ain el-Gazzareen were button seals, and a smaller number of seal impressions was stamped with a cylinder seal. This division, the range of devices and the shapes of the seals generally conform with the finds at 'Ain Aseel.

One broken sealing found in 2001 in Building C carries the impression of a door bolt on its back. Two other sealings are known from other locations at 'Ain el-Gazzareen with clear impressions of bolts. This particular door in Building C had been sealed with a button seal with a bee as its device (Figure 2). The bee is a frequent theme among the seal impressions at 'Ain Aseel. Pantalacci has explained it as a symbol of royal power, and she has compared it to the frequent depictions of falcons and crouching lions upon the seals (Soukiassian *et al.* 2002, 395).

There are 17 stamped bread moulds from 'Ain el-Gazzareen. All of these were found in the excavation squares H13 and I13, which was identified as a bakery. The seals are stamped in the outer face of the moulds, a practice that should evidently be related to the more frequent incised marks found in the bread moulds at 'Ain



Figure 3 The drawing of the device on seven bread moulds, composed on the basis of different impressions. Scale 1:1.

el-Gazzareen and also Balat (Soukiassian *et al.* 2002, 446–56). This is confirmed by one of the fragmentary bread mould that has both an incised mark and a seal impression side by side. Unfortunately, most of the devices are indistinct, and two even appear completely blank, which demonstrates the unsuitability of the fabric of these vessels for rendering the delicate designs of the seals. All impressions in the moulds were made with button seals, as at Balat (Soukiassian *et al.* 2002, 392). Most devices are round in shape, two are oval, and one is square. One mould carries two stamps of the same device, an oval stamp with a lizard, which is a well-known theme among the seal devices in the Old Kingdom.

The stamped bread moulds make up a large proportion of the seal impressions at 'Ain el-Gazzareen. Similarly, at Balat, 10% of all recorded stamps occur on bread moulds (Soukiassian *et al.* 2002, 392), but their number is marginal when compared to the number of incised marks in moulds, of which the excavations at 'Ain el-Gazzareen and Balat have yielded several hundred examples each.

It is remarkable that there are seven bread moulds from 'Ain el-Gazzareen carrying the same device. This is the impression of a large stamp seal, 2.8 cm in diameter, which shows a heraldic device with two birds flanking the hieroglyph for 'life' (*ankh*) and a fallen captive at the bottom (Figure 3). The royal symbolism of this device is clear. In Balat and elsewhere, similar large devices were found, in which a crouching lion takes the place of the fallen captive (Soukiassian *et al.* 2002, number 6307). Pantalacci has noted that the larger seal impressions, which measure more than 2 cm in diameter and which are of good quality manufacture, are specifically associated with the governor's palace at 'Ain Aseel (Soukiassian *et al.* 2002, 394, note 104). It is not clear how this observation should affect our interpretation of the occupants of 'Ain el-Gazzareen, but some high official presence at the site is not to be excluded.

It is important to conclude that the seal impressions prove to be extremely similar at both Balat and 'Ain el-Gazzareen, and it is evident that the same system of administration was practiced in both. No identical impressions have yet been found that would link the two settlements more directly, but it is clear that close connections existed between the different parts of the oasis and such a conclusion would not be inconceivable. (OK)

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