## Ain el-Gedida: Results from the 2006 Field Season.

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### Introduction

The site of Ain el-Gedida is located in the Dakhleh Oasis of Upper Egypt, three kilometers north of the village of Ma'sara and to the north-west of the ancient site of Kellis. As the name of Ain el-Gedida suggests ("the spring of the new [village]"), life at the site was possible thanks to the easy accessibility to water, which is still used nowadays for the irrigation of the surrounding cultivated fields (now dangerously close to the area of the archaeological remains).

A preliminary survey was conducted in 1980 by members of the Dakhleh Oasis Project, who registered the site and assigned it an official D.O.P. number. Thirteen years later, an Egyptian archaeological mission conducted three seasons of excavation at Ain el-Gedida, under the direction of Mr. Ahmad Salem and Mr. Kamel Bayoumi of the local Coptic and Islamic Inspectorate of the Supreme Council of Antiquities.<sup>2</sup> This excavation lasted from 1993 to 1995 and was focused on the south part of the main hill of the site (plates 1–2, area A), which also extends to include at least three additional mounds to the south (areas C, D, E) and one mound to the north-east (area F).<sup>3</sup>

After a first visit to Ain el-Gedida in 2005, the collaborative project between the local Coptic and Islamic Inspectorate and a group of ten specialists was developed,

<sup>&</sup>lt;sup>1</sup> Dakhleh Oasis Project site no. 31/405-N3-1. Cf. Mills 1981, 185.

<sup>&</sup>lt;sup>2</sup> I would like to take this opportunity to thank Mr. Salem and Mr. Bayoumi for allowing us to be part of this new excavation project.

<sup>&</sup>lt;sup>3</sup> Cf. Bayoumi 1998. A small trench was opened also in area E; the mud-brick features that were once exposed are today partially filled in with sand.

thanks to the funding provided by Columbia University and Prof. Roger Bagnall.<sup>4</sup> Excavation was resumed under the direction of Mr. Bayoumi and lasted from 19 January to 2 February 2006. This paper aims to illustrate the results of the work carried out at Ain el-Gedida during the Winter 2006 field season. Due to the large number of structures that were the object of investigation, only the most relevant data for each of them will be provided here. Also, some considerations of a clearly preliminary nature about the site, its layout, and its possible interpretation, will be offered, based on the evidence collected and analyzed thus far.

Before scientific work started, an absolute elevation for the site was taken using a differential GPS system.<sup>5</sup> This allowed for a precise calculation of the elevations for all of the different features that were uncovered and recorded, using both an optical level and a total station

A surface clearance was conducted in order to expose the tops of the mud-brick walls that were visible at ground level throughout the main hill.<sup>6</sup> The topographers drew all of these features and also surveyed the other four mounds, producing the first general map of the site, which included the rooms excavated in the 1990s. Areas C, D, and E were not the object of archaeological excavation this season, but the topographical survey allowed us to recognize the existence of structures that seem to be quite similar, on the basis of construction techniques and of material (mostly walls laid in English bond, with grey-brown mud-bricks of standard size and rich in organic inclusions), to those

<sup>&</sup>lt;sup>4</sup> The staff consisted of Kamel Ahmad Bayumi, director; Nicola Aravecchia, archaeological field director; Anna Boozer, senior archaeologist; Francesco Meo, archaeologist; Gillian Pyke, archaeologist and ceramicist; Angela Cervi, registrar; Marina Nuovo, assistant registrar; Fabio Congedo, Valentino de Santis, topographers; Johannes Walter, archaeobotanist; Silviu Angel, photographer. The inspectors were Sahar Habeb Farid and Mahmoud Mohamed Massoud, of the local Coptic and Islamic Inspectorate of the Supreme Council of Antiquities.

<sup>&</sup>lt;sup>5</sup> With the technical support of Dr. Jennifer Smith of Washington University, St. Louis.

<sup>&</sup>lt;sup>6</sup> The hill extends for about 85 m from north to south and 70 m from east to west.

investigated on the main hill. Apart from a few traces of mud-brick walls, no major features were identified in area F, which is about 230 m to the north-east of area B. <sup>7</sup> The area seems to have been the object of heavy disturbance caused by agricultural activities, at least in modern times, which will surely make its archaeological investigation rather complex.

### Area B

Excavations were carried out in the north part of the main hill (plate 3, area B) in three different sectors, where the layout of several rooms, various in size and often interconnected, was clearly visible above ground. Three rooms (B1-B3) were excavated to floor level (B1) and gebel (B2–B3) in the north-west sector (plate 4).

## Room B1

Room B1 measures 3.15 m by 6.45 m and opens onto rooms B2–B3 along the south side and two unexcavated rooms along the north side. Another doorway is located on its west side and gives passage to an area that has not yet been investigated. The mudbrick walls, which are preserved to a maximum height of ca. 1.80 m, were originally coated with mud plaster. Archaeological evidence shows that room B1, identified as a courtyard, was originally flat-roofed. A niche is partially preserved in the east half of the north wall, inside which a Greek ostrakon was found.<sup>8</sup> A clay floor was uncovered in rather good condition during the excavation. On the south-west corner of room B1 a wellpreserved mud hearth was found with a high density of ash, charcoal, and seeds, which

<sup>&</sup>lt;sup>7</sup> According to Mr. Bayoumi, years ago local farmers found several human bones while digging in area F; this fact led him tentatively to identify this mound as a cemetery, possibly in relation to the main site. Another Greek ostrakon was collected inside the courtyard.

were collected for botanical analysis. While removing a layer of collapse immediately above floor level, many complete or almost complete vessels were found, among which are several bowls, a keg, a long-necked jar, and a sieve (plate 5).

## Room B2

Room B1 opens, along the west half of its south side, onto room B2, measuring ca. 2.50 m by 2.50 m. The room is very poorly preserved overall, with a clay floor that is largely destroyed. The clearance of the sand from inside the room revealed the gebel on which the floor was originally laid. The mud-brick walls, preserved to a maximum height of 1.35 m, were coated with mud plaster, which is a typical feature of several buildings throughout the site. A niche was inserted in the east wall; today it is only partially visible, due to the collapse of the roof and of the upper courses of the wall and to wind erosion. The excavation of this room did not yield notable finds, apart from a few pottery sherds.

### Room B3

To the east of room B2, and opening onto the courtyard (B1), is room B3; it measures ca. 2.60 m by 2.75 m and the maximum height of its preserved walls is 1.30 m. The room still shows a few traces of a beaten earth floor, built above gebel. The lower part of a niche is set toward the north end of the east wall. Several traces of palm rib impressions and straw matting were found on the mud plaster and bricks in the collapse layer excavated immediately above floor level and suggest that originally this room had a flat roof. Among the objects collected during the excavation of B3 are a Greek ostrakon written on both sides and some ceramic sherds. Of interest is the white gypsum band

decorating the north-east corner of this room (plate 6); it partially frames the niche on the east wall and continues on the north wall, following an irregularly stepped pattern the purpose of which is still unclear.<sup>9</sup>

The layout of rooms B1–B3 (and of the two unexcavated rooms along the north side of B1) suggests that they belonged to a domestic unit; this interpretation seems to be confirmed by the presence of the hearth in the south-west corner of the central courtyard and by the typology of the ceramic vessels found in those rooms.

### Room B4

Another room (B4) was excavated to gebel south-west of rooms B1–B3 (plate 7). Room B4, measuring 4.90 m by 2.70 m, has mud-brick walls that are preserved to a maximum height of about 2.30 m near the south-east corner. The access to this room was through a doorway located at the north end of the east wall. During the excavation, remains of earlier walls were brought to light, suggesting that the room, as well as the building of which it was part, underwent substantial modifications, altering the structure of the room itself. The presence of several sectors of walls that are not bound but abut earlier walls and form the north side of room B4 provides additional evidence of these modifications. The large quantity of ash, charcoal (with no trace of smoke on the walls), organic material, broken objects, and pottery sherds found during the excavation suggests that the room was used as a dump at some point. Soil samples were collected from secure contexts in room B4 for archaeobotanical analysis, which we hope will provide more information on patterns of food consumption at the site in Late Antiquity. The numerous small finds that were uncovered and collected from room B4 include fragments of dull

<sup>&</sup>lt;sup>9</sup> About the existence of similar bands at the site of Amheida, cf. Davoli, this volume.

glass bracelets, beads, fragments of textiles, ropes, part of a sandal, a comb, a headless Bes amulet, a Greek ostrakon, and an enigmatic piece of coroplastic (plate 8). Worthy of mention is, in particular, a Coptic ostrakon on nine lines (plate 9); 10 according to the reading provided by Prof. Bagnall, it is a letter from Apa Alexandros to Nikolaos. 11 Apart from its content, rather utilitarian in nature, it is of interest because it mentions a Coptic monk as the sender of the letter. Nevertheless, the recipient is not explicitly so identified and the ostrakon is thus, however suggestive, not sufficient evidence for the presence of Coptic-speaking monks at the site of Ain el-Gedida.

### Room B5

After work was completed in rooms B1–B4, excavation focused on room B5, identified as a church (plate 10). Windblown sand was removed and a roof and wall collapse was revealed. Because of time constraints, it was decided to leave the collapse in place in order to protect the floor level until next field season, when the excavation of B5 will be completed. The room measures 3.65 m north-south by 11.35 m east-west; it has walls preserved to a maximum height of 2.65 m, and was once barrel-vaulted. It was originally connected, through two doorways, to another large rectangular room to the north (A46) excavated in 1994, which belonged to the same building. <sup>12</sup> Windblown sand was removed from A46 as well, and a partially preserved clay floor revealed, including remains of a rectangular feature below floor level. Along the east side of room B5 are a semicircular apse (plate 11), defined by two engaged semi-columns, and an L-shaped

<sup>&</sup>lt;sup>10</sup> The ostrakon measures 9.80 cm by 9.90 cm and has nine lines written in black ink on the convex surface

Bagnall, personal communication, January 2006.
A46 measures about 9.50 m east-west by 3.90 m north-south.

pastophorion immediately south of the apse, in which traces of burnt oil are still visible. The south wall seems to consist of sectors of different walls that are not perfectly aligned and suggest a multi-phased constructional process for this room. This is also visible in the north wall, shared by rooms B5 and A46, where the central doorway was bricked in at some point, leaving the west doorway as the only passage into room B5 (plate 12); this might be related to a re-functionalization of room A46, for which a higher level of separation from B5 might have been required. The nature and the reasons for such a change remain unknown. At least three superimposed coatings of mud and white gypsum plaster have been identified in room A46, confirming the existence of several phases of restoration or modification.

Built against the east jamb of the central passageway is a stepped rectangular feature, which surely lost its function when the doorway was bricked in (plate 13). Prof. Olaf Kaper suggested its typological similarity to a structure uncovered by Prof. Gillian Bowen in the Large East Church at Kellis. 13 This included two other elements, a semicircular feature and a small platform to the east of the stepped structure, which have not been identified thus far at Ain el-Gedida. The excavation of the collapse layer in room B5 might provide additional information on this feature, but its full examination is unfortunately prevented by the bricking in of the central passageway. It might be possible that the stepped platform was used by a preacher to read the Scripture or deliver a sermon; by standing in a higher position in the large, central passageway, he would have been easily seen and heard by the people sitting both in room B5 and in the adjoining

<sup>&</sup>lt;sup>13</sup> Kaper, personal communication, January 2006, For a description of the stepped feature in the Large East Church at Kellis, cf. Bowen 2002, 73. Professor Bowen clarified that the feature in the Large East Church at Kellis has not been identified beyond doubt thus far (personal communication, June 2006). Peter Grossman interpreted it as an *ambo* (Grossmann 2002, 153).

space. The apse of room B5, whose floor level is heavily destroyed but still bears traces of a raised platform originally coated in white gypsum, is part of a later addition, which also includes the *pastophorion*. This seems to be supported by the fact that their walls are not bonded with those of B5 but abut them, as can be easily seen where the south wall of B5 is abutted by the south wall of the *pastophorion*.

Along the north and east walls of room A46 and the north, south, and west walls of room B5 are mud-brick *mastabas*, built to allow people to sit; worth noticing is the mastaba along the south wall of room B5, which takes a curvilinear shape to follow the very irregular course of the wall itself. Traces of defaced painted decoration were found along the north wall of room B5, in particular above a niche toward the east. A two-line graffito was carved on the same north wall but more to the west, mentioning the name Orikeni (Horigenes) and, according to Prof. Bagnall's reading, the Coptic word for God, i.e., Pnoute. 14

The partial excavation of room B5 did not lead to the discovery of complete vessels and the quantity of ceramic sherds that were collected is rather small, especially compared to other rooms investigated in area B. Among the other objects found in room B5, with a higher density in the area of the apse, are pieces of cloth and several coins.

As mentioned above, room B5 has been identified as a church, although its excavation and documentation remain to be completed during the next field season. Room A46 is a large congregational hall furnished with benches; it could have served as a space for the consumption of meals by the community of the faithful, or as a room for catechumens; its precise function has yet to be fully ascertained. The whole complex of rooms B5 and A46 shares several typological similarities with the Small East Church at

<sup>&</sup>lt;sup>14</sup> Bagnall, personal communication, January 2006.

Kellis, carefully studied and published by Professor Bowen. <sup>15</sup> Almost identical is the layout of the two rooms, with a large rectangular space opening to the south into an apsidal room through two doorways, a smaller one to the west and a wider passage in the middle. The similarities are quite striking, even though it is necessary to await full documentation of the church of Ain el-Gedida before proceeding with comparative analysis. The few coins found in room B5 suggest that the church of Ain el-Gedida might have been in use in the first half of the fourth century; this chronological range, also shared by the *domus ecclesiae* of Kellis, <sup>16</sup> is, if not yet confirmed beyond doubt, certainly not contradicted by the pottery evidence collected thus far within the church. Once again, some caution is in order because these are preliminary considerations, to be tested against further pieces of evidence as the result of future work at the site.

### Area A

In addition to the excavation of the above-mentioned rooms, intensive documentation took place in area A of the main hill, excavated by the Supreme Council of Antiquities in the 1990s. This work provided a rich amount of information about the architecture of Ain el-Gedida and enables comparative analysis with the buildings newly excavated.

All the previously excavated rooms were assigned numbers and mapped by the topographers. Besides the large hall A46 (described above), six rooms were selected for their particular architectural interest, in order to create a representative sample; these rooms were easily cleared of the windblown sand that had been deposited in the last ten

<sup>&</sup>lt;sup>15</sup> Bowen 2003. <sup>16</sup> Bowen 2003, 164.

years and all their architectural features were fully photographed and recorded, using standardized feature forms already adopted at Amheida.

#### Room A2

Room A2 is located in the south-west corner of the main hill (plate 14). It measures about 5 m by 3 m and its mud-brick walls are preserved to a height of 1.42 m. It was accessed from a small courtyard through a doorway placed in the south wall; remains of a rectangular niche are visible in the middle of the north wall. A2 is the westernmost of three narrow, rectangular rooms that might have functioned as small storage areas and seem to be later additions to the adjacent rooms to the north. Room A2 was originally barrel-vaulted, with the vault springing at a rather low height from the floor, making the room quite unsuitable for living purposes. A large basin of unfired clay, of about 1 m in diameter, is set at floor level in the north-east corner of the room; it was probably used as a storage bin.<sup>17</sup>

# Room A5

A5 is a rectangular room measuring about 6.5 m by 3.2 m, with mud-brick walls preserved to a maximum height of about 2 m. It is located immediately to the north of room A2. There are two doorways, one set at the east end of the north wall and another at the south end of the east wall, leading to the large room A6 described below (plate 15). Vault springs are still partially visible on the long, and fairly low, north and south walls. Three rectangular niches are inserted in the south wall, backing on the north wall of the

<sup>&</sup>lt;sup>17</sup> No traces of firing activities were found within or outside this feature, arguing against its identification as an oven or hearth.

adjacent room A2. 18 The floors of room A5 and of room A2 are in a very poor state of preservation, showing only traces of a levelled layer of grey-brown clay. A drain, made with a large fragment of a ceramic vessel, is still partially in situ in the west wall of the room, at floor level.

## Room A9

To the north-east of room A5 is room A9, a large rectangular space measuring 3.5 m by 5.25 m, with mud-brick walls preserved to the considerable height of 2.6 m. Four doorways open into this room: two are set opposite each other in the north and south walls, and two other doors are located in the west wall. Two beautiful rectangular niches, surrounded by a white gypsum frame, decorate the east wall (plate 16); a third, arched niche is inserted in the north wall, to the right of the doorway. The room was originally barrel-vaulted; behind the east vault spring is a wall that might indicate the existence of an upper storey. <sup>19</sup> The presence of a stairway in the adjacent room A6 supports this possibility. An L-shaped foundation trench, filled with a course of mud-bricks still visible at ground level, is perhaps to be associated to another, earlier structure the walls of which were levelled when the clay floor, now in poor condition, was laid.

## Rooms A14-A15

Two other rooms were cleared in the north part of area A, that is, rooms A14 and A15, measuring 3.5 m by 4 m and 2.5 m by 3 m respectively (plate 17). They were accessed through a doorway set in the west wall of A14 and opening onto a north-south

<sup>&</sup>lt;sup>18</sup> It is possible that these niches were originally windows, before room A2 was built.

<sup>&</sup>lt;sup>19</sup> Nicholas Warner, who visited the site, confirmed this possibility (personal communication to Gillian Pyke, February 2006).

passage, which led to the area that is currently under excavation. Another door, located at the west end of the south wall of room A14, allowed for passage into room A15. The mud-brick walls are preserved to a considerable height, 2.6 m in A14 and 2.45 m in A15. Both rooms, originally barrel-vaulted, are characterized by beautiful niches, some of which are framed with bands of white gypsum plaster.<sup>20</sup> Traces of white plaster with a few Greek letters were found on the east wall of room A14, but it was impossible to discern the meaning of the inscription or its original extent; even the language (Greek or Coptic) is uncertain. The floors of both rooms are poorly preserved; room A14 shows a few, irregular remains of mud-brick features at floor level, presumably traces of earlier phases of occupation.

## Room A25

Another room, A25, was cleared of sand and recorded in the central part of area A, more to the east. It measures 3.60 m by 3.90 m and the maximum height of its walls, bearing few traces of a barrel-vaulted roof, is 2.48 m. The room was accessed through two doorways, one set at the west end of the south wall and another at the south end of the west wall. A rectangular niche, with a stone lintel still in situ, is inserted in the east wall (plate 18), to the south of a doorway located at the north end of the same wall, which was bricked in at some point. Consistent traces of a beaten-clay floor are visible in the north-west corner of the room and the foundation trench of an earlier wall can be detected in the centre. Pits were once dug in the south-east part of the floor and seem to have been

<sup>&</sup>lt;sup>20</sup> Room A14 has two arched niches on the west wall, to the sides of the doorway, and another roundtopped niche in the south wall. An arched niche is set in the middle of the west wall of room A15.

filled with ash, loose brown soil, and a large quantity of broken vessels. The pits will be fully excavated during the next campaign.

Furthermore, an architectural survey was conducted in thirteen additional rooms in area A; windblown sand was removed from all of them and detailed notes and photographs were taken. In three instances (rooms A24, A27, and A40), the clearance was interrupted before reaching floor level; the reason is that unexcavated archaeological deposits were detected; their future investigation will undoubtedly provide important information about material culture and stratigraphy of the site. Most of these rooms, as well as the six mentioned above, seemed to be largely utilitarian in nature, such as magazines for the storage of food.<sup>21</sup>

### Room A6

Particularly worthy of mention is room A6, located in a central position immediately to the north of the three narrow rooms (A2–A4) preliminarily identified as magazines (plates 19-20). Room A6 was partially excavated by Mr. Bayoumi and is identifiable beyond doubt as a kitchen. The clearing of sand from this space was not completed because of the extremely precarious condition of some of its features; unfortunately, several other structures throughout the site share a similar situation. <sup>22</sup> A6 is a large, rectangular room (it measures about 7 m by 4 m) with two doorways. One is set between the north-west and the north-east walls and opens on a long, narrow passage oriented north-south and leading to a passageway running northwest-southeast to the area

<sup>&</sup>lt;sup>21</sup> Several storage bins, built *in situ* such as the one in room A2, were found in area A.

<sup>&</sup>lt;sup>22</sup> The remaining sand will be removed from room A6 in a future season, with the assistance of a conservator.

of the church. The other door is located at the south end of the west wall and gives access to room A5, mentioned above. At the present state of the investigation, the floor level was not identified throughout the room but it seems to have suffered heavy disturbances. A low mud-brick wall, running north-south and in line with the west wall of the passageway (A8) to the north of the room, cuts through A6. Because of its poor state of preservation, its original function is unknown. A staircase is set against the north-east wall, supported by a mud-brick vault; it was originally built above a stratified deposit of many thin layers rich in ceramic and organic inclusions. To the south of this deposit, and projecting from it, is a mud-brick rectangular feature, possibly reinforcing the staircase, although its exact nature and function are not clear yet. To the east of the stairway, two walls were constructed with a very poor construction technique: one is set against and follows the north sector of the east wall of the kitchen, while the other runs east-west from the staircase, abutting the east wall; a small room (A7) was thus created, separate from the kitchen and accessible only through the vault supporting the highest ramp of steps. The stairway runs north-south and then turns clockwise, apparently obstructing the passage into A8 and suggesting that during at least the latest phase of occupation of this room the passage into the corridor was no longer used. The high walls of room A6 bear no trace of vault springs or sockets for the placement of beams supporting a flat roof. Either the roof and the highest courses of the walls collapsed, leaving no sign of its original existence, or this space was actually an open courtyard. The possible absence of a roof is also suggested by the existence of at least three ovens built at some point here. Two circular bread ovens are located in the north-west sector of the kitchen; one is still partially in situ, while the other lies to the south of its original location; it fell in 2005,

probably as a result of the collapse of part of the staircase to the east.<sup>23</sup> The former appears to belong to the "Later Type" of ovens, following Yeivin's classification, or "Type II-Subtype a," according to Depraetere: that is to say, a circular ceramic oven, built on a raised earth platform and surrounded by mud-brick partition walls.<sup>24</sup> Remains of another round oven are visible in the south-east sector of the kitchen, together with traces of another missing installation that, according to Mr. Bayoumi, might be identified as a rectangular oven.<sup>25</sup> What is visible now are smoke marks on the east wall and ash in a hole cut through the scanty remains of a very low barrel vault. The south-east corner of the room opens on a very narrow passage (A29) with numerous traces of ash that can be detected against its walls; this space might have been used, perhaps, as a dump for the ash cleared from at least some of the ovens in the kitchen. The archaeological evidence shows beyond doubt that room A6 went through several constructional phases, which involved the alteration of most of the walls of the room and of the staircase. It must be noticed that room A6 was located in a rather central position and led, through the straight passageway A8, to an area in the proximity of the church and of the gathering hall. Also, the dimensions of the kitchen and the presence of at least three ovens might suggest that the facility served a fairly large group of people.

## **Ceramics**

A large quantity of pottery fragments was collected, both in the rooms excavated in area B and during the clearance of the rooms in area A, and subsequently analysed by Dr. Gillian Pyke. The sherds found while removing the wind-blown sand from the rooms

<sup>&</sup>lt;sup>23</sup> Photographic evidence exists of its original location *in situ*. <sup>24</sup> Yeivin 1934, 114–5, and Depraetere 2002, 123–5.

<sup>&</sup>lt;sup>25</sup> Bayoumi, personal communication, January 2006.

of area A, excavated by the SCA in the mid-nineties, were treated as surface finds. All the fragments were scanned, but only vessels with complete or long profiles were chosen for further analysis. In the case of room A25, all the diagnostic sherds were kept, since it seems likely that the floor was never reached and the pottery came from a disturbed floor context. Among the best preserved pieces from room A25, which were drawn and photographed, are a bowl with in-turned rim, a lid, and a beautiful juglet.

Area B in the north half of the main hill, where most pottery sherds came from secure contexts, was treated differently, adopting a strategy of complete recording. The excavation of rooms B1-B4 led to the discovery of two significant ceramic deposits, one in room B1 and another in room B4, which will shed light on the ceramic repertoire of Ain el-Gedida. The initial gross quantification of the excavated contexts was carried out; during the process, the body sherds were discarded, while the diagnostic sherds were selected for further examination. The best preserved samples of the various form and fabric groups were drawn and photographed. Nonetheless, the goal is to draw all the diagnostics, from this and the following excavation seasons, in order to build a full catalogue of the forms and fabrics found at Ain el-Gedida.

On the basis of a preliminary study carried out by Dr. Pyke, the ceramic assemblages found in rooms B1 and B4 include many of the vessels that were collected also in room A25, showing a uniformity of forms and fabrics throughout the main hill of the site. All the ceramic forms identified thus far at Ain el-Gedida can be assigned to domestic contexts and point toward a fourth-century dating, spanning from the late third to the early fifth century CE. No diagnostics have been identified yet that are undoubtedly later, or earlier, than this time range.

Among the pottery sherds that were collected during the excavation of area B and the clearance of area A are eight ostraka, seven Greek and one Coptic (already mentioned above). They were recorded and photographed and then examined by Roger Bagnall and Raffaella Cribiore. The content of these ostraka seems to be quite utilitarian in nature (they are mostly accounts and receipts), but they may provide relevant information on the economy of the site. The measures used in them are familiar from the texts from Kellis. Apart from the Coptic letter mentioned above, the most significant item is a receipt for annona for a unit of mounted archers (hippotoxotai) stationed "here", a reference to the garrison of the Ala I Quadorum headquartered at El-Qasr.<sup>26</sup>

Before the end of the campaign, Dr. Tatyana Smekalova of St. Petersburg State University, Russia, surveyed the five mounds of Ain el-Gedida with a magnetometer; this allowed for the identification of six anomalies in the ground in the area south of the main hill. Two more anomalies were identified, one on the south-east mound and another north of rooms B1-B3 on the main hill. According to Dr. Smekalova, such anomalies are perhaps to be related to the presence of features like kilns or ovens.<sup>27</sup>

## Discussion

Many issues have arisen during the 2006 excavation season. In addition to the establishment of a chronology for the site, for which more evidence must be collected and analyzed, there are other questions that still need to be answered. One concerns the

 <sup>&</sup>lt;sup>26</sup> Bagnall, this volume.
<sup>27</sup> Smekalova, personal communication, February 2006.

abandonment of the site. Indeed, the archaeological record has not shown, thus far, traces of any violent destruction. According to the preliminary results of the 2006 investigation, the abandonment of Ain el-Gedida seems to have occurred not long before or after that of Kellis, but its reasons have not yet been ascertained. However, the issue that has caught the highest degree of attention since the very first excavation season concerns the nature of the site, identified either as a rural village or a monastic settlement. <sup>28</sup> No conclusive archaeological evidence has been found yet proving the existence of forms of monastic life at Ain el-Gedida. Also, the general plan does not seem to offer, at first glance, the picture of an organized monastery, built to answer the spiritual and earthly needs of a community of monks living a coenobitic life. Nevertheless, it is important to keep in mind that the structures surveyed and excavated thus far appear to be datable to the fourth century, therefore at a time when one could hardly expect to see standardized forms for monastic architecture. Also, the current lack of other fourth-century monastic settlements in the region does not allow for comparative analysis, which might help in clarifying the problem. On the other hand, the presence of a church with a large gathering hall, not far from a wide kitchen presumably serving a significant number of people, seems to allow for the possibility of such a community. There is clear archaeological evidence for the addition of numerous structures to the earlier buildings, which were often subject themselves to heavy modifications. However, our knowledge on the chronology of the site is, at the moment, too limited to allow us to securely date the various phases of construction. The investigation of the remains of the earlier walls, found in several rooms in area A and B below floor level, might provide useful information on the earliest phases

<sup>&</sup>lt;sup>28</sup> For a brief review of the previous discussion on this topic, cf. Bayoumi 1998.

of occupation of Ain el-Gedida. As reported by Mr. Bayoumi in his 1998 report, <sup>29</sup> many of the later structures did not follow any systematic plan and were also built in a very poor construction technique, possibly to satisfy a rapidly increasing population at the site. The purpose and function of many of these rooms have not been identified yet, but in area A their number and particular layout points to their use by a community, instead of belonging to separate family households.

A field season is planned in the Fall of 2006, with the goal of completing the documentation of the rooms in area A that were previously excavated by the Egyptian mission. In January 2007, the church will be completely excavated with the removal of the collapse layer, and additional archaeological investigation will be carried out in the adjacent rooms, to better understand the relationship of the church and of the "gathering hall" with the surrounding structures. Two other sub-areas have been identified as potential objects of future work: one is a large rectangular room with a crenellated east wall, along the west edge of the main hill; the other is an even larger rectangular building, with two rooms built in the middle, toward the north end of area A. Furthermore, intensive documentation of the most significant architectural features of the whole site will continue, also with the help of photogrammetric techniques.

The poor condition of many rooms excavated and surveyed thus far has raised the question of conservation at Ain el-Gedida. The mediocre quality of several walls and, more in general, of the construction materials used in antiquity at the site; the erosive activity of wind and water throughout the centuries; the pressure carried by the sand

<sup>&</sup>lt;sup>29</sup> Bayoumi 1998, 57.

behind the walls of the rooms that have been cleared: these are all issues that need to be treated in a timely manner and with the utmost care. As a result of a preliminary analysis of the current situation, and on the basis of the time and resources at our disposal, backfill following complete documentation has been suggested by our architect as the best option for immediate preservation of the site.<sup>30</sup>

The aim of the new excavation project at Ain el-Gedida is to carry out a scientifically rigorous and comprehensive investigation of the site. The peculiar nature of this venture, which enjoys the productive collaboration of Egyptian and foreign members and specialists, allows for a particularly intense and rich process of study and interpretation; the different ideas and hypothesis are shared and tested on the field, against all the available evidence, with the common goal of coming to an answer to our several questions.

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## **REFERENCES**

Bayoumi, K. A., 1998 Excavations at 'Ain al Gadida in the Dakhleh Oasis, in O. Kaper, ed., Life on the Fringe. Living in the Southern Egyptian Deserts during the Roman and early-Byzantine Periods. Proceedings of a Colloquium Held on the Occasion of the 25<sup>th</sup> Anniversary of the Netherlands Institute for Archaeology and Arabic Studies in Cairo 9–12 December 1996, Research School CNWS School of Asian, African, and Amerindian Studies, Leiden, 55–62.

Bowen, G. E., 2002 The Fourth Century Curches at Ismant el-Kharab, in C. A. Hope and G. E. Bowen, eds, *Dakhleh Oasis Project: Preliminary Reports on the 1994–1995 to 1998–1999 Field Season*, Oxbow Books, Oxford, 65–85.

Bowen, G. E., 2003 The Small East Church at Ismant el-Kharab, in C. A. Hope and G. E. Bowen, eds, *The Oasis Papers 3*, Oxbow Books, Oxford, 153–65.

Depraetere, D. D. E., 2002 A Comparative Study on the Construction and the Use of the Domestic Bread Oven in Egypt during the Graeco-Roman and Late Antique/Early

<sup>&</sup>lt;sup>30</sup> I am grateful to Dr. Nicholas Warner for his helpful suggestions.

- Byzantine Period, *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 58, 119–56.
- Grossmann, P., 2002 Typological Considerations on the Large East Church at Ismant el-Kharab, in C. A. Hope and G. E. Bowen, eds, *Dakhleh Oasis Project: Preliminary Reports on the 1994–1995 to 1998–1999 Field Season*, Oxbow Books, Oxford, 153–6.
- Mills, A. J., 1981 The Dakhleh Oasis Project Report on the Third Season of Survey September December, 1980, *Journal of the Society for the Study of Egyptian Antiquities* XI, 4, 175–92.
- Yeivin, S., 1934 Miscellanea Archaeologica. I, Ovens and Baking in Roman Egypt, Annales du Service des Antiquités de l'Égypte 34, 114–21.

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- Plate 2: site map.
- Plate 3: map of the main hill of Ain el-Gedida.
- Plate 4: view of rooms B1-B3, facing NW.
- Plate 5: sieve found in room B1.
- Plate 6: white band in the north-east corner of room B3.
- Plate 7: view of room B4, facing NW.
- Plate 8: piece of coroplastic from room B4.
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- Plate 10: view of rooms B5 and A46, facing NW.
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- Plate 17: rooms A14–A15, view from above.
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- Plate 20: plan of rooms A6–A7 (drawing by Valentino de Santis and Fabio Congedo).





Area F

N 50 m





































