A SHORT REPORT ON THE FIELD ACTIVITIES OF
DAKHLEH OASIS PROJECT DURING THE 2006–2007 SEASON

Introduction
The planned 2006–2007 season was due to begin about 15th November 2006. Due to the fact that it eventually began by 20th January, some components of our program had to be omitted. In the end, our work began on 20th January 2007 and continued until 20th March, 2007. Excavations took place at Ismant el Kharab, Amhida, el Qasr, and ‘Ain Birbiyeh Temple. Surveying included geological investigations and searching by the rock art group. There was also some study of materials by the physical anthropological team. Each part of the Dakhleh Oasis Project will be discussed in turn by the principal investigators.

Geology
Dr. Gordon Osinski, Dr. Jennifer Smith, and Johanna Kieniewicz report as follows:

Recent studies have shown that the Dakhleh Glass formed from a meteorite impact event ~200–100 ka in the Dakhleh Oasis, Western Desert, Egypt. However, it is unclear at present as to whether the Dakhleh Glass was formed during a cratering event (i.e., during the formation of a meteorite impact crater) or a large aerial burst (i.e., when the projectile explodes in the atmosphere and does not form any significant crater). Therefore, searching for possible impact craters was a high priority for this field season. Previous field studies by members of the Dakhleh Oasis Project recognized a “crater-like” feature, named informally as the Dakhleh Bow Wave Structure (DBWS), in the far eastern part of the Dakhleh Oasis, north of Camelthorn Basin. We made two visits to the DBWS, during which time this feature was mapped in detail. This mapping showed that while the DBWS is “crater-like”, it is actually a basin structure, where the flat-lying sedimentary rocks have been folded or bent downwards. We also surveyed the rocks in the surrounding terrain in able to better understand the DBWS. This mapping showed that the rocks in the DBWS can be traced out into the surrounding terrain where they eventually become flat lying. During the regional survey we also discovered several faults that are not present on geological maps of the area. These faults appear to trend ~N–S and E–W and may be responsible for the formation of the DBWS: at least one fault, and possibly more, run through the DBWS. At least one additional fault runs N–S and has controlled the formation of a wadi or canyon that runs into Camelthorn Basin. These observations indicate that the DBWS was not responsible for the formation of the Dakhleh Glass, but other craters may still be present at other locations around the Dakhleh Oasis.

We spent a significant portion of our 10 days in the field attempting to determine the distribution of Dakhleh Glass throughout the oasis, in hopes of elucidating spatial patterning in the occurrence of the glass that may be helpful in ascertaining the source. We documented 65 localities where Dakhleh Glass was present at the surface (Figure 1); these localities were typically in the vicinity of outcrops of Quaternary lacustrine carbonates (CSS). Some localities consisted simply of single isolated pieces of glass, others were large concentrations. At each we noted the approximate average size of glass pieces, the approximate number of pieces present, the occurrence of vegetal impressions, and the average vesicularity of the glass. Future analysis will focus on identifying spatial patterning in these parameters.

The Dakhleh Glass occurs in situ within the Mid-Pleistocene lake sediments at Locality 390 and Locality 397. Although this fact was established during previous field seasons (2004–2006), these localities were re-examined, specifically with the intent of understanding the depositional mechanism for the Dakhleh Glass and its associated sediments. At Locality 397, the Dakhleh Glass occurs in two layers, separated by 0.5 m to 2 m of sediment (varies depending upon outcrop). Presuming that the Dakhleh Glass formation occurred during one event, understanding the stratigraphy surrounding the in situ localities is important for the purposes of understanding why these two layers occur, and what that might reveal about the impact of the catastrophic event upon the surrounding environment. This is ongoing work, a component of which
will form a chapter of the doctoral dissertation for Johanna Kieniewicz, with the goal of understanding the impact of the catastrophic event documented by the Dakhleh Glass upon the Mid-Pleistocene environment of Dakhleh Oasis.

The sediments underlying the glass commonly are reddened, with a baked appearance. The lower layer of Dakhleh Glass is often highly vesicular, and plant impressions are common. The Dakhleh Glass is often surrounded by friable, silty sediments that vary in colour between grey and pink-red. These sediments occur in discontinuous lenses throughout the stratigraphy, and are often surrounded by what are likely plant ashes. Charcoal also occurs sporadically in association with the glass. Within the stratigraphy at Locality 397, the carbonate content within the sediments increases upsection in the sediments. The second layer of glass was observed to (at some outcrops within Locality 397) occur as a more discontinuous layer than the lower layer of glass. The presence of plant impressions within the glass in the upper layer varies considerably, from that exhibiting abundant plant impressions, to that with very few. However, the fact that plant impressions are common in this layer, as well as the lower, suggests that if the glass in this layer was redeposited, it was not transported a considerable distance. These observations will be used in the construction of a depositional model for the Dakhleh Glass.

![Figure 1](image1.jpg)

**Figure 1** Dakhleh Glass localities (red dots) identified during the 2007 season, overlain on ASTER imagery of the oasis.

**Epigraphy**

Reports on epigraphic work from Ismant el-Kharab, Ain Birbiyeh and Mut el-Kharab in 2007 by Prof. Olaf E. Kaper will be found in connexion with each site report below.

The Monash University group\(^1\) undertook field work as part of the Dakhleh Oasis Project between 5th January and 14th February in 2007. This period was divided equally between study of material from previous excavations at Ismant el-Kharab and Mut el-Kharab, and new excavations at Ismant el-Kharab. In general, the first two weeks and the last week were devoted to study of material, while the remainder were occupied with the excavation, though some study and drawing of material continued simultaneously with the latter activity.

I: Study of material from previous excavations

This may be summarized as follows:

- Sorting and recording of ceramics from the excavations at Mut el-Kharab with special reference to contexts of Ptolemaic Period date; a basic corpus of shapes and fabrics was established, and many contexts were sorted and washed preparatory to recording.
- Recording and drawing of the main pieces from the cache of moulds discovered at Mut el-Kharab.
- Final examination of all registered material from the excavations at Ismant el-Kharab from Houses 1–5, and the Large and Small East Churches and the West Church, and from the Kellis 2 cemetery; work on the publication of this material is well advanced.

\(^1\) The team comprised Colin Hope (field director), Gillian Bowen (assistant director; excavator of A/11), Wendy Dolling (excavator of B/3/1), Paul Kucera (excavator of B/3/2); James Gill, Joylene Kremler and Manja Wentendorf-Lavall (draughtspersons); Andrew Jamieson, Ashten Warfe and Amy Thomson (ceramicists), Yvonne Pecher (study of cartonnage), Rozanne Livingstone (textile studies), Barry Rowney (architect); Helen Whitehouse (art historian) and Marie-Dominique Nenna (glass studies).
A detailed study of the glass from the excavations in Houses 1–5 at Ismant el-Kharab for inclusion in the publication of those structures.

- Detailed study of the textiles from Ismant el-Kharab, with special reference to the decorated pieces, also for use in the publication.
- Study of the painted cartonnage from the Kellis 1 cemetery.
- Reconstruction and drawing of the main pieces of stucco sculpture recovered from recent excavations at Ismant el-Kharab in structure B/3/1 Room 1; the most notable reconstruction was of a bust of the goddess Isis.
- Detailed study of ceramics from ‘Ain el-Gazzareen, from the bakery and Structure C particularly, as part of the project to determine the date of the occupation at the site and analyse ceramics in relation to room/area functions.
- Ceramics in relation to room/area functions.

II: The Excavations

Excavation was conducted within three structures at Ismant el-Kharab: the large painted residence of the second century, B/3/1, and its nearby columbarium, B/3/2, both commenced in previous seasons, and in structure A/11.

A/11: A Water Feature

This structure is located on the northern edge of the site, due east of Enclosure 2 on the north of the temple of Tutu temenos, circa 25 metres south-east of North Tomb 1, and adjacent to a large late well. The focus is a colonnaded room, with structures to the east and west, and a garden to the north. Excavation was restricted to the colonnaded room and a room opening off it to the west; the walls of other structures were delineated. The colonnaded room is oriented north-south and has columns on its north, west and east;
originally the room was open on the north and there entrances in the north-east corner and the centre of the west wall. A baked-brick, white-plastered circular basin was located in the south of the central section of the room; this was used to hold water. Water was fed into the basin through two channels placed on baked brick-walls that project from the two central columns on the north. The baked-brick surface and walls of the basin were removed in antiquity and only small sections of the water channels remain. The room was constructed in the late third or early fourth century; this has been established by reference to the ceramics it yielded from construction levels. At some point during the fourth century the room was re-used. This is indicated by the bricking-in of the door in the north-east, an oven built against the east wall, fires against the west wall and a garden wall built to the north. The second phase is dated on the basis of coins and ceramics. A well was constructed over the southern section of the room in the fourth century. The room to the north-west was excavated to the upper floor deposits only. It had also been reused; a bin was built against the north and west walls and the floor deposits contained donkey manure. The remains of 6 date palms are visible in the garden to the north.

While the function of the structure is uncertain, is does resemble Nymphaea from elsewhere in the Mediterranean region.

A/11: clearance of surface sand which extends to the edge of an intrusive well on the south, and parts of the east colonnade; looking south-west.
A/11: showing the circular basin (surviving to one course in height) and remains of baked-brick flooring built upon sand, with the two channels to feed water into the feature from the north, and the eastern colonnade; looking north-east.

A/11: detail showing north end of the western channel that fed water into the central feature, and the northern baked-brick wall built upon a deposit of fourth century ceramics; looking south.
Plan of Area showing the location of the painted residence B/3/1 and the columbarium, B/3/2.
B/3/1: The Painted Residence

Investigation focused on extending the area of excavation in Rooms 1a and 1b with the main aim of clarifying the nature of the original architectural features partially exposed in 2006. Two trenches were excavated; Trench C measuring 10.75 x 2 m extended the entire length of the southern area Room 1a and directly to the north Trench D measuring 7 x 2 m within Room 1b.

Trench C

Trench C was located within the southern area (Room 1a) and ran parallel to the eastern edge of the previously excavated Trench A. It terminated at the northern face of the line of large brick piers, the transition point between the two rooms. Following the removal of wind blown sand from the surface a large amount of structural collapse was evident. Within this collapse there was a significant amount of fragmentary decorated gypsum plaster both painted and moulded forms. The upper layer of collapse consisted of mud brick wall material and this deposit directly overlay a distinct deposit of roofing structural collapse. The roofing collapse comprised mud fragments with palm rib impressions, fibre rope and fragments of palm rib. It was clear from the nature of the rubble that Room 1a originally had a flat roof. Excavation of the roofing rubble exposed a floor deposit of straw and animal manure clearly representing re-use of the structure for animal stabling. Below this deposit the original floor was poorly preserved and constructed of white gypsum laid on a thin layer of coarse-grained sand, which in turn was laid on a
compacted mud surface. A large brick entranceway and step running east-west between the two piers and leading from Room 1a to Room 1b was also revealed.
B/3/1 Room 1 Trench C: southern face of the square pier; looking north.

_Trench D_

Trench D extended the area of excavation in a direct northerly line to the southern edge of Trench B. Surface sand was removed across the entire trench area revealing mud brick structural collapse. The majority of the rubble deposits excavated from Trench D consisted of wall material. Any roofing fragments were restricted to the area immediately adjacent to the large pier and columns located to the west of the trench. The structural debris indicates that the central area of Room 1b was not roofed but that the area between the columns and the walls was originally roofed.

As in Trench C the removal of structural collapse from this Trench exposed a deposit related to reuse of Room 1b as an animal stabling area which overlaid a poorly preserved original gypsum floor. Sub-floor test excavation in Trench D revealed a mud brick platform providing structural support for the west column; the remnant of gypsum floor had been laid on top of this platform. To the north of this platform structural rubble packing had been placed on top of the natural surface to create a level surface for the laying of the floor. This construction technique parallels that found during sub floor excavation in Trench C, however in Trench D there were no distinct activity surfaces or _in situ_ architecture in the investigated area relating to an earlier building phase.
B/3/1 Room 1 Trench D looking south into Trench C.
Additional Excavation Areas

In addition to the main excavation in Room 1 preliminary clearance was undertaken in Room 7 and some additional surface clearance was undertaken to further delineate the limits of the structure as a whole. Only a small portion of Room 7 was excavated with surface clearance to a depth of circa 20 cm across the entire room and a test cut in the southeast corner measuring 1.5 x 1.5 m to a depth of circa 60 cm. A doorway was revealed in the south wall and a niche or cupboard in the west wall. The structural collapse contained both wall material and elements from a flat roof. On all four walls the upper register of decorated gypsum plastering was visible consisting of painted panels with floral and geometric motifs.

Surface clearance was undertaken to reveal the limits of Rooms 18, 19 and 20. In addition a doorway leading into the structure was identified in the south-east corner of Room 11.

These excavations have enabled the decorative scheme and architectural details of the central rooms of B/3/1 to be determined. These have confirmed the provisional assessment that this structure displays many classical features identify it as belonging to a wealthy resident of ancient Kellis, and which are distinct from the native Egyptian tradition.

B/3/1 Room 7: exposed area in south-east corner; note the remains of a collapsed mud-brick column in the room.
B/3/2: phasing of wall construction; scale 1:100

B/3/2 Sections: for location refer to plan of B/3/1 and B/3/2 above.
B/3/2: The Columbarium (Pigeon Loft)

This field season saw the examination of Rooms 1 and 2 on the east of the building. The dimensions of the two rooms appear identical at 3 x 3 m and both incorporated barrel vaulting (the vault of Room 2 is 90% intact). In order to facilitate excavation, Area 1 – a 2 x 5 m trench located directly on the north outer face of Room 1 – was established and excavated in conjunction with the rooms. This area contained mostly rubble (approximately 1.8 m deep) from collapse of the upper storey as well as a large quantity of pigeon housing pots (521 kg). An upper storey to the structure that incorporated the pigeon pots was clearly indicated by the presence of fragments of mud plastering and brick preserving the impressions of such pots. Room 1 contained much windblown sand that was deposited on rubble from equivalent structural collapse and this covered the entire room to 1.2 m depth.

Excavation of Room 2 could not begin until a section of the wall and doorway between both rooms was secured and rebuilt. Once this was completed work continued and Room 2 was found to contain windblown sand for at least 2 m depth. Room 2 also indicated that bats had once nested within it. Below the sand, stable flooring was encountered as well as a significant coverage of ash and soot indicating fires. These deposits, occurring 25–30 cm above the remnants of floor level, contained ceramic, glass, faience, textile, fauna, leather and basketry artefacts. Diagnostic ceramics indicate a second-third century date. Only one Greek ostrakon was found in the room, yet surprisingly, three deposits of a yellow-green mineral (possibly jarosite) were encountered within the stabling deposit. The traces of original flooring found in conjunction with the wall foundations revealed that the height of the room reaches 3.3 m at the vault peak.

Below the rubble in Room 1, 45 cm of stable matter – indicating the presence of donkey and camel – and flooring was revealed. Pockets of ash as well as a pocket of yellow-red ochre mixed in with the stable matter were also encountered within. This particular room fill at these levels was artefact-rich. It contained much ceramic – complete and semi-complete pots – and items of glass, faience, textile, worked wood, flora, fauna, leather, basketry, footwear. Importantly, 19 fragments of Greek papyri, 6 Greek ostraka, 1 jar sealing with docket, a child’s silver ring decorated with an image of Nefertum, and a well-preserved mud sealing with and impression representing Herakles and the Nemean lion were also discovered. Diagnostic ceramics included second–third century and 4th century CE material. Below this deposit, similar secondary flooring occurred for 15 cm and a further 8 fragments of Greek papyri and three Greek ostraka were found amongst items of glass, faience, worked wood, leather, textile, basketry, flora and fauna. Underneath these deposits, the original mud-plastered floor remained in very good condition across the room. A test cut revealed it to be approximately 4 cm thick, laid directly on the surface of the site.

An examination of the foundations in both rooms indicated that the walls sat directly upon the surface of the site in a few places, but in others clearly were constructed upon foundation cuts and foundation coursing. A mastaba (45 cm height) features along the north outer face of the structure. This appears to be consistent with the previous season’s find around the western side. The rubble here appeared to cease at a point level with the threshold and doorway into Room 1. Below this point hard compacted layering mixed with clay occurred. The composition of the doorway itself (i.e. door jambs and plastering) suggests that it underwent modification. It is also evident that the outer east wall is a separate construction which butts the south and inner east walls. Moreover, it consists of predominately grey brick as opposed to the red brick used throughout the south, west and north walls.
The Mammisi at Ismant el-Kharab

The season of four weeks ran from 20th January through 15th February 2007. The team consisted of: Laurence Blondaux, chief conservator, Tamer Ramadan and Haana Shawki, assistant conservators, Martin Hense, chief draughtsman, Elizabeth Bettles, assistant draughtsperson. The work of reconstruction and conservation was concentrated on the southern section of the vault, specifically on its western end. Reconstructions were finalized on a group of eight gods depicting the Ogdoad of Hermopolis, who are followed by the gods Thoth and Seshat, from the third register of the vault’s pharaonic decoration. Another major group that could be finished was that of a series of four block thrones with brightly coloured pedestals belonging to the gods of Kellis in the second register. It is expected that the work on the southern side of the vault will be continued and finished during the next field season. The tracing of reconstructed fragments focused on the eastern half of the northern side of the vault, which all but finished the recording of that side of the mammisi.
The 2007 excavation season started on the 1st of February and continued until the 24th. The main goal of this season was to finish the excavation in area 2.1, a rich house of the 4th century A.D. in the centre of the city, and to explore part of the street in front of the house in area 1.3 and part of the courtyard south of the same house. Area 2.1 has been under excavation since 2004. The excavation of the house situated in area 1.3 started during the 2005 season. 2

**Area 2.1** (Figures 1–2) (Paola Davoli, Eugene Ball)

Area 2.1 is formed by a domestic structure comprised of 12 primary rooms to which, in a later stage of occupation, one room was added. In this season we completely examined all the rooms to the floor level. In addition, test trenches were dug beneath the floors belonging to this structure in six rooms. The house has a square plan (dimensions approx. important room of the house could be accessed from a central doorway situated in the south wall of 15 x 15 m). The rooms are organized in layout around one more or less centrally situated room (room 2, dimensions approx. 3.17 x 5.1 m). The two main entrances, situated both on the east side and the west side of the villa, gave access into this centrally located room through two barrel vaulted rooms (12 and 7). The most room 2. This main room (room 1) is the largest in the house (dimensions approx. 5.3 x 4.7 m), was fitted with a domed roof, and was painted in registers on all walls. It was clearly the reception room of this structure. Two doors in its west wall gave access to two barrel vaulted rooms that were excavated this season, rooms 14 and 11. From room 2, the east wing of the house could be accessed. The major feature of this wing is room 6 (dimensions approx. 7.1 x 3.6 m), a large rectangular room which had a flat roof. The northern wing of the house was made out of two barrel vaulted rooms with mainly domestic function, probably for the preparation and storage of food, and a staircase with a small room underneath. In the northwest corner of the house a barrel vaulted room was connected with the main entrance room, room 12. A later addition is formed by room 15 which was accessed through a passage north of the staircase. To the north and the northeast of the house, there is one large courtyard which has been under excavation since 2005. We are not sure that it, at any time, belonged to the house. This season’s excavation activities were mainly concentrated in the west wing of the house in Area 2.1. Rooms 11, 12, 13 and 14 were completely or nearly completely excavated. In several other rooms test trenches were dug to gain information about the number of phases represented by the structure. The large courtyard (rooms 9 and 10) was also completed. The rooms excavated this season are described in more detail in what follows.

**Room 13** (Figure 3)

Room 13 measures approx. 2.8 x 3.1 m. Its doorway was situated in the southwest corner of the room. The east wall of the room has a small vaulted niche set into it. Inside, this is divided into two compartments by a wooden shelf, no longer present. The opening of the niche is 31 cm wide and 33 cm high. Both interior and exterior surfaces were whitewashed. There are traces of soot both on the inside and the outside, probably indicating the use of an oil lamp. The room was covered by an east-west oriented barrel vault. This roof was found to be largely collapsed both in the room and in the alley to the west of it. Both springings of the vault are largely in place. They are situated at approximately two metres above floor level. The inside of the vault was covered by a thin white gypsum plaster. The floor is quite well

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2 The staff consisted of Roger Bagnall, director and papyrologist; Paola Davoli, archaeological field director; Olaf Kaper, associate director for Egyptology; Eugene Ball, Mirjam Bruneberg, and Elly Heirbaut, senior archaeologists; Nicola Aravecchia, Anna Boozer, Roberta Casagrande-Kim, Dorota Dziedzic, Francesco Meo, archaeologists; Delphine Dixneuf, ceramicist; Ashraf Senussi, ceramicist and pottery draftsman; Emmeline Healey and Amy Vella, assistant ceramicists; Nicholas Warner, architect; Delphine Renaut and Helen Whitehouse, art historians; Raffalla Cribiore, epigraphist; David Ratzan, epigraphist and numismatist; Carina van den Hoeven, Egyptologist; Simone Occhi and Fabrizio Pavia, topographers; Angela Cervi, registrar; Marina Nuovo, assistant registrar; Constance Silver and Tamer Ramadan, conservators; Bruno Bazzani, director of database operations; Ashraf Barakat, assistant to the director; Karen Green, librarian; Maarten Hense, artist; and Anna Kelley and Andrea Myers, student trainees.
preserved and is made of grey compacted mud. All the walls were plastered with mud plaster, upon which gypsum plaster was applied. This plaster was painted in purple with panelled decoration. This decoration reached a height of one and half metres. The upper part of the decoration was formed by a thin band of yellow paint. On the walls, a total of six and a half panels are still visible. Decorations of birds and garlands are visible inside the panels. There are several names of Greek gods (Dionysos, Hephaistos, Polydeuces, and Kairos) painted above those decorations. The west wall is badly damaged. The evidence suggests that this happened in antiquity. The wall has shifted inwards. The decoration was covered in two subsequent phases with whitewash. After the room lost its initial use, it was probably used as a storage space. This is indicated by the presence of two bins built in the northern part of the room (the first bin is 1.43 by 0.76 m, the second 1.27 by 0.74 m). They were partly built into the already existing damage on the west wall of the room. The primary decoration of the room was executed in purple, yellow, white, green, and black.

Room 12

Room 12 forms the main entrance of the villa. Its dimensions are approximately 3 x 3.7 x m. A large 1.60 m wide doorway was present in its west wall. It had an east-west oriented barrel vault which has collapsed. The springings of the vault are, however, still in place. They are placed 1.90 m above floor level. The floor is composed of compacted mud. The walls were faced with mud plaster.

Room 11 (Figure 4)

Room 11 is a barrel-vaulted room with an east-west orientation. Its dimensions are approximately 2.8 x 3.6 m. It was entered from room 1, the main room of the house, the doorway being situated in the southeast of room 11. The east wall of the room has partially collapsed, and the west wall has shifted inwards. A sequence of collapses has in parts badly damaged this room. Room 11 was a painted room, with a white plastered vault. The walls were decorated in panels up to approximately 1.72 cm above floor level. The top part is formed by a white cornice decorated with two interwoven yellow and red lines forming specular spaces in which decorations of either birds, bunches of grapes, or flowers are present. The main panel is delineated by a black cornice. In the corners of the room, columns executed in red and white paint with Corinthian capitals are present. The main decorative motif is formed by patterns of yellow tangential and intersecting circles (diameter 17–18 cm) adorned with rose petals and flowers. At the bottom of the wall there is a band of marbleized panels. In the middle of the north wall a vaulted niche is situated (40 cm wide, 43 cm high, and 44 cm deep). The dominant colours used in the decoration of the walls are green, yellow, red, black, and white.

Room 14 (Figure 5)

Room 14 is an east-west oriented room covered by a barrel vault. Its dimensions are approximately 2.7 x 3.5 m. The room was entered from room 1, its doorway situated in the northeast corner. The floor is made of compacted mud, badly preserved by the collapse of the vault and walls above it. The south wall is completely hidden and probably largely destroyed by a collapsed vaulted roof of the room directly to the south of room 14 belonging to the neighbouring house, not yet excavated. Room 14 has been decorated; the vault, however, was only adorned with white plaster. The walls were decorated in panels up to 1.54 cm above floor level. The panels were surrounded by a cornice in red, with yellow decoration representing vines. The main decorative motif is formed by patterns of yellow tangential and intersecting circles (diameter 19–20 cm) adorned with rose petals and flowers. At the bottom of the wall there is a band of red paint. The dominant colours used in the decoration of this room were red, yellow, and black. At the centre of the north wall, a vaulted niche was built (dim. 46 cm wide, 52 cm high, and 42 cm deep). The interior of the niche was white washed. In the northwest corner of the room, two small walls were built perpendicular to each other forming a bin of approximately 1 by 0.60 m.

The occupational debris above the last floor level contained many interesting finds including coins, ostraka, and animal bones, in which many bird bones could be recognized.
Test Trenches within the Perimeter of the House

This year test trenches were dug in rooms 6 and 15. A trench excavated in room 4 beneath the floor levels in 2004 was expanded. In the southern part of room 6 a trench was dug to gain insight into the number of phases of habitation represented in this part of the house. In addition to three floor levels, we found a foundation trench of the western wall of the room which was cut through several layers of occupational debris down to gebel. In the southern part of room 15, north of the staircase, a trench was excavated, its main goal seeing if the room once contained a subdividing wall. In the trench, two previous building phases were recognized.

The trench in room 4 covered the larger part of the room. In it layers of debris, mainly used for the filling of the space between the foundations of the wall, were excavated. They covered a foundation trench of an earlier wall located directly beneath the east wall of the room. An unexpected find composed of 5 objects buried next to the entrance of room 4 was uncovered. This cache consisted of a pewter dish with a composite ivory and metal object placed in it, a small bronze situla turned upside down and located over it, and two bronze lamps. The lamps were decorated with a lion’s head on the handle. Also included were chains for hanging the lamps and tools for cleaning them.

Rooms 9 and 10 (North Courtyard) (Figure 6)

This year the excavation of room 10 was completely finished. Under the later layers of habitation debris, a square structure was encountered together with several surrounding walls in baked brick, approximately under the course of the walls of the later phase of room 10. The main feature in the excavated room is the square structure (approx. 2.75 x 7.8 m) made up of four walls executed in sandstone blocks and slabs, with some baked bricks added in some places (Figure 7). The core of the structure is formed by a layer of strongly concreted sandy mud. It is not clear if this material is actually gebel or if it is a deliberate fill of the structure. Surrounding the sandstone structure are four channels gently sloping from one direction to another. The channels are approximately 60 cm deep and 45 cm wide. The outer boundaries of the channels are formed by baked brick walls also forming the boundaries of the room. The eastern channel was covered by a series of seven sandstone blocks, partially still covered with mud. Probably these mark the location of an entrance into this early phase of room 10. These channels were probably for the passage of water. In the northern and western walls square openings have been observed. It is thought that the water would have entered from these openings into the channels, circulating counter clockwise around the square structure and being drained through an arched opening in the northeast corner of the room. It is thought that this structure is part of a much larger building used as thermae.

The main feature excavated in Room 9 is the circular structure (Figure 8) recognized first in 2005 (approx. 5 m across). From the excavation it is clear that we are dealing with a round building with a hypocaust situated under the floor. The building is built in mud brick with a floor of baked brick slabs covered in lime plaster resting on 18 baked brick pillars set on a mud brick floor. From the hypocaust five channels lead outwards to six fistulae, four of them built into the circular structure above the hypocaust, and two others to the south, outside of the circular structure. The main channel enters the hypocaust system from the south. It is thought that its furnace is situated somewhere in the area of the later house, 2.1. The hypocaust and round building above it were most probably part of the same thermae as to which the square structure in room 10 belongs.

During the excavation of Rooms 9, 10 and 15 many walls were found both in mud brick and in baked brick. From these walls, it becomes clear that at least five main building phases are represented here, all of these preceding the building of the house in area 2.1.

At the end of the excavation we started the clearing of sand in a new room to the north of room 10 and 15. On its western wall, patches of lime plaster, both white and painted, have survived. On the white part of the plaster, several lines of Greek texts written in red are still legible. One of them represents the first few lines of the Iliad.

Area 1 Excavation Report (Anna L. Boozer)

Area 1 clusters around the major east-west road in the north-eastern extent of Amhida. The structures in this area are primarily domestic and industrial in nature. In the 2005 and 2006 campaigns, excavation
focused upon Area 1.3, a domestic context. The 2007 excavations were carried out in two areas in the vicinity of Area 1.3. The first area was the east-west oriented street, Area 1.2, located north of Area 1.3. The second area was a large open space, Area 1.4, interpreted as an exterior courtyard probably belonging to house 1.3. The purpose of these excavations was to complete the documentation for Area 1.3, clarifying its chronology, economic situation, and relationships to other features in Area 1.

**Area 1.2**

Area 1.2 is located north of house 1.3, in front of the entrance, and functioned as a major east-west oriented street into Amhida. We laid out a 6 x 2 metre east-west oriented trench in this area, aligning it against the north wall of Area 1.3.

Three surfaces were exposed, all three composed of compacted mud. Ash was found between these street surfaces in the southern half of the trench. By contrast, the northern part of the trench showed a continuous replastering of street surface levels with little to no refuse in between. It is noteworthy that insignificant quantities of windblown sand were found between these surfaces, indicating that the accumulation of sand was not a considerable problem in Area 1. It is possible that the structures on the north side of the street served as a barrier to the sand-laden wind from the north.

During the course of excavating this trench, a prior trench was found in the southern 2.15 metres of our trench and aligned with the north wall of house 1.3. It was 0.50 metres wide. This trench cut through all depositions and features until it reached the ash below the third (from top) surface. It appears to be an excavation trench, given the precision of the cut and the standard width of the trench. It is unknown to what campaign this trench belongs, since it did not occur during the Dakhleh Oasis Project work at the site.

The first (top) surface was highly variable in elevation, rising up on either side of the doorway into Area 1.3. The location of these elevated sections indicate that they may have been used as barriers to hold back the refuse that filled the lower areas on top of this street surface. This refuse contained several noteworthy objects: fragments of a terracotta statuette, donkey hoofs, and an ostrakon in Greek that dates to before 275 AD (see [Greek Epigraphy and Papyrology](#) section of report). Moderate densities of ceramics, slag, bone, and glass were also represented.

The second (from top) surface was found in fragmentary condition to the south, due both to its thinner construction in the south and also to the presence of the prior trench in this vicinity. This surface was covered in ash to the south. The floor contained high densities of plaster fragments within the matrix of compacted mud. Few objects were found within the ash and surface.

Another layer of ash was found between the second and the third (from top) surface. Again, few objects were found within the ash, but those that were recovered included ceramic wasters that probably derived from the kiln area on the north side of the street. This third surface was dark grey and covered with sherds broken into small fragments from heavy usage of the street. It was quite flat, although it rises slightly in elevation between the southern and the northern extent of the trench, indicating that the natural terrain of Area 1 rose to the west in this vicinity.

Ash and high densities of objects were found between the third street level and clean yellow sand, including several reconstructable ceramic vessels. A foundation trench for the north wall of house 1.3 was cut into the natural deposit of sand. The data collected in this trench allow us to state that the north wall of house 1.3 and the third floor surface of the street were contemporary and that the floor level of the street was raised by the accumulation of waste and not of wind blown sand.

**Area 1.4**

Area 1.4 is a large L-shaped open space (20 x 21 m) south and east of house 1.3. It is thought to be an exterior courtyard belonging to Area 1.3. We laid out a north-south oriented 10 x 2 metre trench against the south wall of house 1.3 and the west wall of Area 1.4. This trench was later expanded by an additional 1.5 x 1.5 metres to the east, against the south wall of Area 1.4.

Thus the trench covered the entire length of the wall that borders the courtyard to the west and its southwest corner. Here one poorly preserved floor surface was found, composed of compacted mud, above which were found significant deposits of dung and other organics. The coprolites of donkeys, camels, and cows were represented in addition to apricot, olive, and date pits. In addition to these organic remains, a bread oven and an oven platform were found built into the southwest corner of the courtyard. They were in
a poor state of preservation, with only the bottom course of bricks remaining. The northern 6 x 2 metres of
the trench contained low to moderate densities of material remains and included a complete bowl, a loom
weight, and an ostrakon dating to the third century AD. Object densities were greater in the southern 4.2 x
2 metre trench addendum and included a miniature lamp, a clay figurine head, loom weights, and several
complete vessels.

Area 1 Summary
Area 1.2 served as a street into Amhida and consisted of three surfaces. Little refuse and sand was found
between these surfaces, indicating that the area was largely kept clean and that the structures on the north
end of the street served as a barrier to windblown sand. The street excavation clarified Area 1 chronology;
Area 1.2 was built at the same time as the domestic context, house 1.3, which was occupied during at least
part of the time that the kilns on the north side of the street were in use. The two ostraka with third-century
dates confirm the impression offered by preliminary study of the ceramics from Area 1.3 that the building
and occupation of the house date to the third century, ending in the fourth.

Area 1.4 served probably as a multi-functional exterior courtyard for house 1.3, with cooking features as
well as sufficient space for stabling animals such as donkeys, camels, and cows. The courtyard would need
more investigation to fully understand its function and its relation with the surrounding buildings.

Greek Papyrology and Epigraphy (Roger S. Bagnall)
The 2007 campaign produced an abundant harvest of written material, including 187 ostraka, the largest
number by far of any year so far. All but a few came from Area 2.1. The discoveries there included a
second small archive of material like that of Serenos found in 2004, only larger; this one is centred around
a man named Domnion, who was already known from earlier textual finds. He may have been the last
owner of the house. Much of the other material came from refuse dumped below floors in various places
and cannot be connected directly with the inhabitants of the house. The contents of these ostraka, however,
are very similar to what we find in the ostraka from habitation levels. In both cases, we are dealing above
all with texts concerned with the management of the flow of goods coming from agricultural properties,
avove all from the various well-centred rural properties in the hinterland of Trimithis. What is perhaps
most striking is that Domnion and Serenos both, along with many others, seem to be in the business of
estate management. It is possible that their wealth rested in part on the management of the property of still
wealthier individuals living elsewhere, whether in Kharga (as in the case of the owner of the property with
which the Kellis Agricultural Account Book is concerned) or in the Nile valley. The house in Area 1.3,
although much less productive of texts, seems typologically similar, perhaps the home simply of a much
less wealth and high-ranking manager.

A second textual concentration notable in 2007 but also detectable earlier is a number of exercises, some
of writing (letters of the Greek alphabet and personal names, particularly), some in drawing. These came
above all from fill below the late floors in the north court area and cannot be connected with the occupation
of the house. It is possible, however, that more than coincidence is involved, and that this material has
some connection with the school that seems to have been operating in the vicinity. Future work to the
north of Room 15 may shed some light on this question.

As usual, the texts offered a host of miscellaneous details of interest. These included two texts
concerning quantities of flaxseed dispatched to the pigeon house, where it seems likely that they were used
as part of the birds’ feed. Two other texts refer to lith( ), a measure used in the Kellis Account Book only
with respect to cotton and perhaps equal to ten Roman pounds. If this is correct, large amounts of cotton
(200 kg) are at stake, shedding new light on the sources of wealth in the oasis in the Roman period and
raising a host of interesting questions. The enigmatic tiphagion attested in other texts from the oasis
appears in a considerable number of ostraka. The only new light on its nature is that it is consistently
paired in ration accounts with loaves of bread and usually comes in the same number. One might suppose
that it was another form of baked good, rather than a raw foodstuff. From the military and official domain,
the ostraka mention a centurion, an actuarius, a stationarius, a camelarius, and an officialis. On the cultural
front, an early ostrakon from fill mentions a komodos (a comic mime) and a flute-player, while the second
clay tablet found at Amhida deals with disbursements, probably of oil, for ‘the God’, a cult official, and a
festival. The abundant harvest of personal names offers novelties every year. The most interesting of those from 2007 were Hephaistammon, a new-ammon compound, Agesilaos, another contribution to the roster of classical Greek names, and Ephrem, a startling appearance of this Syriac name from a period contemporary with the famous hymnodist.

In Area 1.3, ostraka were few, but two of them were datable to the third century, an important point for the chronology of the house. One of these has a value for wheat that could not be encountered after AD 275; the other has the honorific month name Hadrianos, on present evidence not attested after about AD 240.

Graffiti turned up in several rooms in Area 2.1, usually difficult to interpret. Egyptian month names appeared in several places in Room 13, devoid of context. The dipinti in Room 19, the room to the north of Room 15 with its elegiac couplets, may be left for discussion in next year’s report, as only a small amount of this room has so far been opened. But it is worth mentioning that they include the opening line of the Iliad.

Raffaella Cribiore and David Ratzan pursued their study of the important dipinto in Room 15 with elegiac couplets and hexametres belonging to poems exhorting students to compose rhetorical works in verse and serving as a model for such compositions.

**Egyptian Epigraphic Work (Olaf E. Kaper)**

Work on the blocks with relief decoration from the temple at Amhida. About 100 building blocks with relief decoration remained from previous seasons (2004, 2005 and 2006), which had been photographed but not fully recorded and drawn. In the 2007 season, these blocks were nearly all retrieved from storage at Ain Birbiyeh and the student Carina van den Hoven (Leiden) prepared drawings of them under the supervision of Kaper. In addition, a total of 162 fragments of decorated blocks were drawn, recorded and photographed, leaving only a limited number of fragments to be recorded in future seasons. One block had not yet been cleaned from a layer of gypsum cement that had covered it since Roman times. Once cleared, this block could be dated to the 26th Dynasty on the basis of parallels and its subject matter could be established as a food and incense offering to the god Thoth depicted as an ibis seated within a papyrus thicket. Another new discovery among the blocks was the fragment of a limestone stela inscribed with parts of four lines in hieratic script that can be dated to the Third Intermediate Period. The stela had been cut down for reuse in the Roman period, under Domitian, but the thickness of the block (30 cm) suggests that the stela had been of monumental proportions. The surviving text mentions the god Thoth as well as the name for Amhida, sA-wHAt (‘The back of the Oasis’).

Work also began on the decorated blocks at El-Qasr. On 24 February 2007, the reused blocks at the house no. 354 were recorded. These blocks were first remarked upon in publication by Ahmed Fakhry, who considered the blocks to be the in situ remains of a temple. Recent excavations at Amhida, however, have shown that this site must be the original location of all Pharaonic reliefs at El-Qasr. The case of house 354 is singular, because it preserves two complete columns of hieroglyphic inscription upon blocks from a temple doorway that had been reused integrally as found. This doorway can now be dated to the 26th or 27th dynasty, judged by the comparable material found at Amhida. A total of five loose blocks remain to be copied during future seasons at El-Qasr.

**Fragments of Painting from Room 1 (Olaf E. Kaper)**

Work on fragments from room 1 of the house in area 1 at Amhida. Because of unforeseen circumstances, two weeks could be devoted in 2007 to the assemblage of figurative scenes from the trays of fragments stored in the conservation laboratory. In 2006 these trays had been cleaned of superfluous dust and sand and it was therefore possible to reconstruct many elements of the decoration. Among these were figures of Europa (Figure 9) and Ganymede from the east wall and one of the supporting female figures from the south-western corner of the room. The scenes were prepared for assembly by Kaper and then joined by Laurence Blondaux, so that the assembled tiny fragments would not be lost again. Helen Whitehouse assisted in this effort, and she also studied the resulting iconography. Delphine Renault later organized photographed the trays systematically and uniformly.
Topographical Work (Simone Occhi and Fabrizio Pavia)

The topographical work carried out during the 2007 excavation season was preceded by the verification and re-definition of fixed survey points, due to the impossibility of identifying all the stakes used as benchmarks during the previous seasons of survey (2001–2006); this situation required the elaboration of a new and permanent traverse in which it was possible to include the whole site, beginning from the already extant points S1 and S2 and adding three new station points (S3–5) that were cemented to the ground.

General Plan (Figure 10)

While working at the new site plan, it was possible to verify the level of precision of the previous one, which showed a significant difference in the area between the temple and area 2.1, investigated in the 2001 and 2002 topographical campaigns; Therefore, it was necessary to re-map all the buildings above ground level.

Area 1.2, 1.3, 1.4

The previous topographical survey of this area was improved and integrated with the new features uncovered during the 2007 excavation season.

Area 2.1 (Figure 1)

Following the conclusion of the archaeological excavation within this area, a new and complete 2D plan was drawn, together with a detailed 3D survey (Rooms 1–2, 4–8, 11–17 and perimetral walls of Rooms 9–10); in both cases, particular attention was paid to the representation of all architectural features (niches, thresholds, vaults, staircases, etc.);

Also for Area 2.1, a photogrammetric survey of almost all the visible walls was carried out. In short, it consists of a series of non-compressed photographs that, once exported and geo-referenced using coordinates taken with the help of a Total Station, are rectified and joined together in a photomosaic; the final result is a single high-definition photogram, which can be used once imported and scaled in CAD environment as a graphic base layer for vectorial drawings. Following is a list of the photogrammetric images that were joined together in a photomosaic and vectorialized in CAD:

Room 2 (North, South, West, and East walls);
Room 4 (North, South, West, and East walls);
Room 6 (North, South, West, and East walls);
Room 7 (North, South, West, and East walls);
Room 8 (North, South, West, and East walls);
Rooms 9 and 10 (North wall);
Room 11 (North, South, West walls);
Room 12 (North, South, West, and East walls);
Room 13 (North, South, West, and East walls) (Figure 11);
Room 14 (North, South, West, and East walls) (Figure 11);
Room 15 (North, West, and East walls);

Cartography (Figure 12)

The map that was created shows territorial units that were identified on the basis of archaeological and geomorphological data, with the goal of identifying the boundaries of the site and understanding the evolution of the area in relation to anthropic occupation.

The cartographic survey included a wide area delimitated by the modern village of Amhida to the North, by the currently cultivated fields to the West and to the South, and by the modern road to the East.

Recovery and Conservation Treatment of Objects composed of Bronze, Pewter and Ivory (Constance Silver)
We have referred above to the discovery of a cache of objects in Room 4 of Area 2.1 (Figure 13). Following its recovery, treatment and examination at the conservation facilities, the cache was revealed to be composed of five highly significant objects:

1. A substantial bronze vessel of a ‘bucket’ shape called a *situla*.
2. An elegant oil lamp (‘Oil Lamp 1’) composed of bronze, with a handle in the form of the head of a lion. A bronze ring remains in the mouth of the lion. A bronze chain is attached to the ring. Attached to the chain are the lamp’s stopper and a tool designed to clean residues from the lamp.
3. A smaller bronze oil lamp (‘Oil Lamp 2’) composed of bronze, with a handle in the form of the head of a lion. A bronze ring remains in the mouth of the lion. A bronze chain is attached to the ring. Attached to the chain is a tool designed to clean residues from the lamp. The body of the lamp is decorated with three flute-like designs. The spout appears to be in the form of a grape leaf.
4. A small pewter plate that appears to be made from pewter or some type of alloy that is heavily composed of lead. This plate is in very poor condition. It was recovered from the bronze *situla* in the conservation room.
5. A highly unusual object composed of carved ivory, a bronze finial, interleafs of a ferrous metal, and a possible wood handle.

At the time of its discovery, it was possible to discern only the form of the *situla* turned upside down in the ground, with oil lamp 1 attached to it. Another bronze element was evident but not identifiable. The pewter plate and ivory object were not visible. After considerable discussion, it was decided that the cache had to be removed by the end of the day and taken to the conservation room for treatment. This report will summarize the conservation treatment undertaken in the field, the system used for extrication of the cache, and the conservation treatment carried out in the conservation room.

The initial field treatment almost always entails measures designed to stabilize the very friable and corroded metal so that it can be lifted without causing it to collapse and shatter under its own weight. In the case of the cache of Room 4, the heavy mineral concretions and the fused state of all the bronze objects heightened fears that the weight of the cache combined with its poor condition would cause it to implode as it was being lifted from the ground.

The following field treatment was developed and implemented successfully. All the dirt was removed from the *situla* and oil lamp 1. The visible bronze surfaces were first consolidated with a 5 percent solution of Acryloid B72, as wetting agent, followed by infusion with a 15 percent solution to act as the consolidant. The surfaces were visibly strengthened. Following consolidation, the objects were supported with cyclododecane. The soil under the cache was carefully excavated with a flat tool and a piece of metal moved into place under the cache. The cache was then safely removed from the ground and placed within a supporting basin of sand for its transport to the conservation room.

In the conservation room, measures were undertaken to separate and individually treat all the objects. It was assumed that the cache was composed of the *situla*, an oil lamp, and a probable ornate handle for the *situla*. Oil lamp 1 was removed from the *situla* and oil lamp 2 by mechanical means, primarily dental tools. Oil lamp 2 eventually was revealed as the heavy mineral accretions were removed with mechanical means.

Oil lamp 2 also had fused to the *situla* and had to be removed by mechanical means. Because the corrosion was so heavy and unstable on oil lamp 2, it was also consolidated with Acryloid B72, to ensure no loss of surviving surface details that might be preserved within the corrosion.

After the oil lamps were separated, it was determined that the *situla* was strong enough to be removed from the supporting sand. Once removed, it became evident that another vessel and object had been under the *situla*. The vessel -referred to in this report as the pewter plate- clearly was in many pieces. A documentation system was devised for removal of the pieces so that they may eventually be reconstructed. Briefly described, each piece was located on a photograph and given a number identification. The number was then written on a small sample bag and the piece placed in the bag. Pieces numbered 1–27 appear on Figure 14.

After removal of pieces 1–27, soil and other detritus were removed, revealing more pieces. These were photographed before removal and are identified with letters, A–X. Each piece was placed in a sample bag with its designating letter written on the bag. These pieces are shown on Figure 15.
Following removal of pieces A-X, more soil and ditritus were removed, until the large sections of the pewter plate were revealed, as was the ivory object that had been placed in the plate. The large pieces of the pewter plate were identified as 1A–11A. These pieces are shown on Figure 16. The pieces were placed in individual sample bags with identification written on the bag.

Some pewter pieces were located within the situla. The pieces in situ were photographed and designated A1–A5. They were collected and placed in individual sample bags. These pieces are shown on Figure 17. The pieces of the pewter plate received no conservation treatment.

The ivory object proved to be in very unstable condition. The ferrous metal interleafs had rusted and the bronze finial had corroded. The ivory element had fractured and delaminated. Several tests of possible conservation treatments were undertaken on pieces of coeval bones found in the Villa. The following treatment was selected. The entire object was carefully cleaned with a sable brush and a blower. It was consolidated with a 10 percent solution of Acryloid B72. The delaminating back of the object was next held in place with small pieces of crepaline adhered with Promacto, a pH neutral adhesive that is strong but remains soluble in water. With this reversible treatment, the object is stabilized at present but can be treated definitively in the future.

The five objects that compose the cache were packed in acid-free tissue and placed in boxes that also include any associated fragments. The pieces of the pewter plate have been placed in four individual bags that reference their location on Figures 14–17. Oil lamps 1 and 2 are packed in a single container that also includes their associated fragments and elements. The four bags that contain the pieces of the pewter plate also are in this container. The situla is in its own container, with associated fragments. The ivory object also is in its own container, with associated elements and fragments.
Figure 15

Figure 16
‘Ain Birbiyeh Temple

The sandstone temple at ‘Ain Birbiyeh dedicated to Amun-Nakht and built by a succession of Roman emperors was the subject of a continuing program of epigraphy and conservation. The work this season concentrated on the Sanctuary, the Contra-temple and an area outside the north-east corner of the northern corridor.

In the Contra-temple area, we concluded excavation of the area of the screen wall. The exterior of this wall was embellished with rectangular panels which are undecorated. The wall is preserved to the row of uraei, which had been a decorated group. So, this is nearly at the top of the screen wall. The inside of this wall is undecorated. Adjacent to the inside face of the screen wall is another wall, built of reused blocks. These have not yet been examined for decoration or architectural elements. This planned for next season.

In the northern corridor of the temple, we examined the western end to search for architectural details. The space excavated did not reach floor levels, but there was sufficient to ascertain that there was no doorway into the Contra-temple, as there is in the southern corridor. There is, however, a large doorway in the west wall. The space for which these corridor doorways have access, is unknown as yet.

Test trenching at the north-east corner of the northern corridor has revealed the existence of another gateway, lying parallel to the gateway of Augustus Caesar, and more or less the same size. Complicated with the gateway structure is a heavy wall running parallel for a distance, alongside the gateway, then turning southwards and running towards the earlier gateway. The extraction of this wall and the gateway structure must await next season’s work.

It should be stated that the hard clay which surrounds the temple is very difficult to excavate because any excessive vibration created by the digging picks can cause the surface of even unexcavated stone to become dislodged. Thus, the work must be slow and careful if most of the evidence is to be recovered.

The report of the conservator A. Zielinski is as follows:

In the 2007 season, work at Ain Birbiyeh Temple concentrated principally in the west part of the temple complex. The last couple of week’s new exploratory trenches were cut in the north-east corner of the complex.

This season work continued in the Sanctuary chamber, in the Contra-temple area and in the north corridor at the Contra-temple. New exploratory trenches exposed new architectural features that possibly do not belong to the temple itself.

1. Work in the Sanctuary chamber was concluded with a partial exposure of the stone floor. The work here included complete exposure of the west wall and attempts were made to expose more of the other walls. Exploration of the Sanctuary came to a halt when part of the west wall collapsed, revealing an almost complete delamination of the inner face from the wall. This fortunately occurred after the completion of epigraphic and architectural recording of the chamber. Heavy timber supports were installed to prevent further collapses. A steel-wire-mesh reinforced lime mortar was installed on the wall to protect the exposed masonry. The chamber was then backfilled with clean sand to the height corresponding to the ground level on the exterior.

2. Work in the Contra-temple included exposures in selected locations of parts of the screen wall and parts of the Contra-temple floor. In the course of these exposures, remnants of a poorly constructed wall were found, located at the interior face of the screen wall. Parts of the wall were exposed to assess its condition and the origin of the masonry. There are indications that the wall was erected with re-used blocks. Work in the north corridor was limited to the west end where an exploratory trench was dug to inspect and examine the architecture of that part. A door opening was found in the west end of the corridor, but not a door leading into the Contra-temple.

Conservation interventions in these areas included installation of mortar infills to tighten the masonry, hardening and cleaning of exposed stone surfaces and recovery of fragments of blocks.

3. The exploratory trench in the north-east corner of the temple complex intended to examine the corner of the enclosure wall exposed remnants of yet another gateway and the remains of a masonry wall. The entire masonry assembly in that area has been seriously affected by soil instability in the past. At the time of site closing, work stopped about 1 metre above the expected floor level in this area. The exterior face of the enclosure wall contains a niche. In the remaining fill in front of the niche were found remains of substantial stone blocks, most likely parts of ceiling/roofing assembly. Expose this season were the tops of these blocks, with final exposure planned for next season. The fill in this location is a hardened and very dense clay that, when combined with the condition of the masonry, considerably slows down the pace of exposure. Conservation of the masonry has to follow the exposure very closely.

The conservation interventions here included mortar infills to tighten the masonry assemblies, hardening and cleaning of the stone and installation of heavy timber braces as a preventative measure for the time between seasons.

4. This season a general backfilling of the site has begun with partial backfilling of the Sanctuary and the room next to it. There was also a complete filling of the eastern gateway.

The epigrapher, Prof. O.Kaper reports on his work as follows:

At ‘Ain Birbiyeh, the work benefited greatly from the assistance of Ms. Elsbeth van der Wilt. The excavations revealed more relief decoration in the sanctuary, the full extent of which only became known when the floor was reached at circa 4.50 m from the ceiling in the north-western corner of the room. In the lowest register on the western wall, the soubassement, two sets of cartouches were found which finally made identification possible of the emperor named and depicted in the room. These cartouches read Servius Galba Caesar, which is identical to cartouches of Galba at Deir el-Shelwit (Luxor), the only other place in Egypt where his name has been found in temple reliefs. The other cartouches in the sanctuary may now be read as containing the full name of this emperor: Lucius Livius Sulpicius Galba Caesar, from which the element Servius has been curiously omitted. Unfortunately, after the cartouches of the soubassement had been read, the western wall collapsed and was no longer accessible for recording in full. The other exposed reliefs on the walls were fully recorded and copied, however, before these were to be backfilled. Many fragments have been found during excavation that may be associated with the scenes on the wall. These were largely copied, photographed and documented during this season. The extant reliefs on the rear
wall of the temple, and its associated buttress, were copied in full. The date of the buttress could now be fixed in the reign of Domitian.

As a result of this year’s work, the history and architecture of the temple can be much better understood. There are now five emperor’s names associated with its decoration; these are Augustus, Galba, Titus, Domitian and Hadrian.

\textit{El Qasr}


The QDP team consisted this season of Mrs. Anetta I. Lyzwa-Piber MA (16th February–22nd March), Mr. Szymon Maslak MA (11th–16th March), Mrs. Verena Leemhuis-Obrecht (20th February–25th March), Prof. dr. Frederik Leemhuis (12th January–25th March), Prof. dr. Rudolf Peters (20th February–9th March), Dr. ir. Wolf Schijns (30th January–19th February) and Ir. George Dekker (10th–17th March) and was assisted by the restorer, Mr. Rizq AbdelHay Ahmed, and a team of 9 master craftsmen and 90 workmen. The supervising inspector of the SCA was Mr Sayyed Saleh Sayyed. The 2007 season was funded by the Royal Netherlands Embassy in Cairo and the Faculty of Arts of Groningen University. The activities of the 2007 season of the QDP, which took place in the period from 18th January till 30th March, were subdivided into the following parts:

1. Completion of the reconstruction of Bayt al-Qurashi.
2. Reconstruction of the collapsed Bayt Al `Uthman.
3. Restoration and reconstruction of the partially collapsed Bayt Abu Yahya.
4. Restoration and reconstruction of the partially collapsed annex to Bayt al-Qurashi.
5. Clearing out of the adjacent parts of the restored/reconstructed houses on the east side.
6. Completion of the drawing of an accurate ground plan of the Shihabiyya quarter.
7. Study of the material found in the rubble of Bayt al-Qurashi and surroundings.
8. Research into the early history of al-Qasr.

1. Completion of the reconstruction of Bayt al-Qurashi
The reconstruction of Bayt al-Qurashi is now complete. The outside of the eastern part has been plastered and also the rest of the walls on the inside. Where appropriate hasira mats of the traditional type have been put in some of the rooms.

2. Reconstruction of the collapsed Bayt Al `Uthman
The ground floor of Bayt Al `Uthman had been reconstructed during last season. This season all four floors, including the stairs have been reconstructed. The remaining part of the northern wall of the inner part appeared to be quite weakened. After restoration wooden supports on the outside were put in place. These temporary supports will remain in place till next season, to be removed when the mud brick has settled.

3. Restoration and reconstruction of the partially collapsed Bayt Abu Yahya
The first and second floors of the house to the north of Bayt Al `Uthman which is locally known as Bayt Abu Yahya had either collapsed or in such a bad state that they had to be removed and reconstructed. Large cracks in some of the walls were mended. The extension of Bayt Abu Yahya above the street was reconstructed to its original height which could be ascertained from an old photograph. In the rubble of the collapsed roofs some fragments of documents were found. These were rehydrated and put between glass.

4. Restoration and reconstruction of the partially collapsed annex to Bayt al-Qurashi
The annex to the south of Bayt al-Qurashi, which actually constitutes a complete house was restored and partially reconstructed. It now again has its original two floors.

5. Clearing out of the adjacent parts of the restored/reconstructed houses on the east side
In order to prepare for the sanitary units in the open spaces to the east of the restored/reconstructed houses the open spaces were cleared out. The rubble that was cleared out appeared to be relatively recent and apart from fragments of documents, which were rehydrated and put between glass, nothing of archaeological interest was found.

6. Completion of the drawing of an accurate ground plan of the Shihabiyya quarter
Dr. Wolf Schijns continued measuring and drawing the ground plan of the whole Shihabiyya quarter as well as the plan of the upper floors of the quarter. This survey is now complete and the official drawings will be prepared and completed after the season.

7. Study of the material found in the rubble of Bayt al-Qurashi and surroundings
During the 2007 season Anetta Łyzwa-Piber MA and Szymon Maslak MA continued the study of the pre-modern Islamic pottery which has been retrieved from rubble deposits in Bayt al-Qurashi. A set of the best preserved vessels, as well as the pots or shards with red painted or incised decoration was recorded (drawings, photos, descriptions). This catalogue which was created on the basis of the finds is the first typology of plain domestic, local pottery from al-Qasr. The description of this collection which dates dated from the Ottoman period until the Thirties of the XXth century was completed.

Prof. dr. Sandor Fodor continued the study of the magical documents found in Bayt al-Qurashi and Prof. Dr. Rudolf Peters continued the study the legal documents among the papers found in al-Qasr during the campaigns of 2003, 2004, 2005 and 2006. He has now identified about 180 complete or nearly complete legal documents. In addition the collection contains numerous fragments of such documents that may also yeild useful information. Some of them might be combined to complete documents. So far he has read and edited 102 complete (or nearly complete) documents and created a database, listing, among other data, the names of the persons mentioned in them.

8. Preparation of the plans for sanitary units
Dr. Wolf Schijns and Ir. George Dekker prepared plans for the projected sanitary units which will be necessary to give the now restored/reconstructed houses a useful function in the future. Permission to build these units next to, but separate from the houses has been asked from the SCA. In two meetings with Engineer Mohammed Imam Nayel, president of the local unit of al-Qasr and with Engineer Zahr Bashendi, executive engineer of the local unit of the town of al-Dakhla the method of connecting these units to the sewage system of al-Qasr was discussed. A report will be prepared about the best way to realise this connection is being prepared.

9. Research into the early history of al-Qasr

In the collapsed house to the east of the annex to Bayt al-Qurashi remains of walls were found. These walls looked like the remains of the foundation of a house from the Ottoman period. On clearing out the rubble it however appeared that they were the walls of a structure from before that period. Wall niches and the upper part of a door were It was cleared out to a depth of about 1.5 m. The rubble consisted nearly entirely of broken mud brick and nothing of archaeological relevance was found in it. However it is likely that further down this may be different. It was decided to postpone the further excavation till next season. Judging from the placement of the niche and the height of the door the original floor will be about one metre lower. The floor room in question thus will be about 2.5 m below the present street level and as such is another indication of a habitation phase from before the Ottoman period.

In the northern part of the quarter a lintel was discovered which had been reused face down above its original place. It was carefully taken out, reinserted and fixed with the inscription facing the street. It is a beautifully executed early lintel inscribed with a bold carefully executed thuluth calligraphy. The name of the builder/owner of the house is al-Qurashi Mas’ud son of the judge Ahmad al-Siba’i, a person until now unknown. The date is somewhat damaged, but it is probable that it was made in 971 AH.

As a service to the community of al-Qasr the collapsed roof of the mosque of the mausoleum of Shaykh Nasr al-Din was also repaired

Physical Anthropology

Professor J. E. Molto reports on a short season:

In late November 2006, the physical anthropology team had a short study season during which samples were curated by placing remains in individual containers which were made of metal and were thus protected from insect attack. An error study was also made which will dictate which of the variations studied on the human skeleton are reliably scored.

Conclusion

The 2006–2007 season of the Dakhleh Oasis Project despite the late start, had several positive features. The work at Ismant el-Kharab at the painted residence went ahead with excellent results. El Qasr has continued to be an excellent restoration of the mud-brick medieval town, with two houses being completed and several others well advanced. After all the searching for other wooden carved door lintels another one has been found. At Amhida, the restoration of the mud-brick pyramid has been completed and the painted villa has been finished. Plans are afoot to create a replica villa which can be open for visitors. At ‘Ain Birbiyeh, the Sanctuary and other parts of the temple have been completed and refilling has commenced. In the next season we hope to begin in November to have time to excavate at ‘Ain el-Gazzareen and in the Kellis cemeteries, as well as full excavation at Mut el-Kharab, at Amhida, at ‘Ain Birbiyeh and to continue the restoration work at el Qasr.

Respectfully submitted,

Anthony J. Mills
Project Director.