The 2012 season started on 31 March and concluded with the registration of finds on 19 April 2012. It was conducted as a part of the New York University-Columbia University Amheida Project, directed by Roger Bagnall.

The Reading team consisted of Anna Lucille Boozer (director, archaeologist); Ashraf Barakat (assistant to the director and site supervisor); Jane Timby (ceramicist); Amanda Moore and Elizabeth Mazucci (registrars); Gabor Thomas (topographer, archaeologist); Amalea Dora Burr (photographer); Gaber Murad (house manager); Hazel Thornthwaite, Laura Dodd, Rhiannon Joyce, Rhiannon Gardiner, Rizwan Ahmed, Richard Kevill, and Rory Williams-Burrell (student assistants). The SCA inspector was Abdalla Mohammed Naser el-Din Mahdi. Giovanni Ruffini (papyrologist, epigrapher) examined the ostraka via photographs from New York.

The 2012 excavations took place in Area 1, an area of Amheida part of which was previously explored (2005-2007) [Figure 1]. Prior excavations focused on a house (Area 1.3) [Figure 2] and two test trenches—one in the street (Area 1.2) and one in the courtyard surrounding B2 (Area 1.4). The 2012 excavations extended to the east of the Area 1.4 trench in order to more fully expose the Area 1.4 courtyard. The ceramics and finds from this area were examined during the field season, as much as was possible, by the ceramicist and the registrars.

**Area 1.4 Excavations** (Anna Lucille Boozer)

The 2012 excavation season exposed an 11.5 x 10.2 meter area of courtyard 1.4 (including re-exposing the 2007 trench), which wraps around House 1.3 to the north [Figure 3]. The purpose of this excavation was to understand spatial usage inside and outside of houses within the Area 1 neighborhood. It was hoped that we could also understand economic relationships and exchanges within this neighborhood as the
courtyard could have been an important place for bringing in and sending out trade goods.

The 2007 trench in Area 1.4 exposed a bread oven and platform [Figure 4] as well as some patchy floors and the beginnings of an informal wall along the westernmost 2 m of the trench. Our 2012 trench exposed a 9.5 x 10.2 m area just east of the 2007 trench in order to understand the entire area of the courtyard behind house 1.3.

In the northwest quadrant of the new trench we found what appears to be a small enclosure, which was built on top of previous courtyard refuse. This prior deposition contained a partially preserved hearth as well as considerable quantities of ash and debris from cooking, which appears to have taken place in this area of the courtyard [Figure 5]. The northern portion of the trench seems to have been repurposed for stabling animals at a later date, as evinced by considerable quantities of dung found predominantly in and nearby the enclosure. The walls of the enclosure were informally built on top of the cooking refuse found in prior depositions. These walls did not include standard foundation construction methods as they were built with bricks lying along their stretchers rather than their headers. Moreover, the walls were only one-brick thick. The area within the enclosure contained four loom weights, all of which were found within close proximity to one another. This spatial proximity suggests that a loom was once placed along the north wall of the courtyard, potentially in the area just west of the enclosure. A well-preserved wooden comb was also found within this context.

The southwestern quadrant of the trench, east of the bread oven, showed a different usage of space. Numerous fragments of painted wall plaster were found in the wall collapse that was unearthed in the southern portion of the trench. These fragmentary wall paintings appear to have derived from a house located just south of Area 1.4 and sharing the south wall of the courtyard. It was not possible to reconstruct scenes from the plaster, but fragments of geometric patterns and a range of colors were detected. The deposition underneath the collapse, and on top of a floor level, contained a number of loom weights as well as numerous small unfired clay objects. These objects appear to have been
gaming pieces and fragments of unfired figurines. Many of these objects might be classifiable as ‘toys’ and were not functional tools.

The central portion of the exposed area was more eroded than either the northern or southern extremities near the walls. Even so, three small fragments of cloth were recovered, including two of linen and one of cotton. Other organics, such as fragments of two-ply palm reed rope, were also recovered. No architectural features, apart from a floor fragment, were recovered from this area of the trench.

The mud floor for the courtyard was patchy throughout, but was evidenced across the entire trench. Elevations taken of the patches suggest that there may have been two floor levels. Only the lower floor level was preserved in the middle of the trench, while the upper floor level was preserved along the north and south walls of the trench.

The easternmost 4.5 meters of the trench were excavated subsequent to the first 5 meters of trench excavation. This sequential trenching was done in order to ensure that the whole excavation area could be completed within the time constraints. This easternmost trench was stratigraphically less complex than westernmost portion exposed. It consisted mainly of an initial layer of windblown sand followed by collapse depositions in the north and south ends of the trench. These collapse depositions appear to have derived from the courtyard walls and vaulted ceilings from the houses on the north and south ends of the courtyard. These collapse depositions intruded somewhat into the stratigraphic unit beneath them, which consisted of another layer of windblown sand. This windblown sand deposition probably took place immediately after the abandonment of the courtyard and prior to the collapse of walls in the area. An ostrakon, dating to the time of Trajan, was recovered from this context.

Occupational floor deposits were uncovered across most of the trench and there were only a few patches where this debris was missing. Finds from within this deposition included beads, figurine fragments, and a Bes amulet, as well as significant quantities of ceramics and additional loom weights and grinding stones. A possible spindle whorl,
made out of wood, was also recovered. An ostrakon was recovered from this deposition along the south wall of the trench. It likely dates to the early fourth century, which is consistent with other data from prior excavations that suggest that the abandonment of Area 1.3 and Area 1.4 occurred in the early fourth century.

An area of intense burning and possible food preparation was uncovered in the south east quadrant of the exposed area. This area consisted of an ashy context with an informal fireplace created by stacking two bricks on top of one another. In addition to this informal fireplace, two partial firedogs, a large quantity of blackened ceramics and charred organic deposits, such as seeds, were found. Below this context we exposed additional layers of ash, fire dogs, and blackened ceramics. This prior deposition included a bread plate and a large fragment of ceramic used for bread kneading, which are probably related to the bread oven and platform located west of this context. The remains of a two-ply string woven through plant fibers was also recovered from this ashy context, indicating a possible brush. Although the edges of this area were ill defined, the concentration of material clearly signaled an area of the courtyard that was used sequentially for food preparation, suggesting that the southern area of the courtyard served a specific purpose for the preparation and cooking of foods.

**Sondages**

We excavated three sondages in Area 1.4 in order to assess diachronic change in the area. One sondage was located in the northwest corner of the trench in the area previously exposed in 2007. This sondage allowed us to see the articulation and foundations of both the exterior courtyard west wall and a north wall of the courtyard (south wall of Area 1.3). No artifacts were recovered from the 1 meter excavated within this sondage and we excavated through hard gebel for approximately 50 cm, indicating no prior occupation in this area of the site.

We excavated an additional sondage along the south wall of the courtyard. This sondage recovered some artifacts, but only in the vicinity of this south wall. It quickly became clear that these artifacts derived from a foundation trench that was dug in preparation for
building the south wall. This foundation trench is clearly visible in the profile of the sondage baulk and indicates that the bread oven was built contemporaneously with the exterior wall of the courtyard. We reached gebel below the foundation trench and recovered no additional artifacts after the excavation of the foundation trench.

Our third sondage was located in the northeast corner of our 2012 excavation area. It was placed against the north wall of the courtyard (south wall of Area 1.3) and against a wall stub that was exposed in this northeast corner. No artifacts were recovered from this sondage and gebel was reached.

These three sondages make it clear that there was no occupation in the vicinity of this portion of Area 1.4 prior to the third century AD. Moreover, the lack of artifacts suggests that there probably was not an occupied area in very close proximity to Area 1.4 until the third century AD.

*Area 1.4 Exterior Walls*

In addition to these excavations, we conducted stratigraphic shovel scraping of the windblown sand on top of the walls surrounding Area 1.4 in order to fully define the space surrounding the courtyard. This excavation entailed removing windblown sand from on top of the walls. We analyzed all of the material deriving from the sand above the walls as part of two stratigraphic units—one for each wall segment exposed. These excavations revealed that there was only one entrance into Area 1.4 and that this entrance was from the street located to the north of the courtyard, and lay immediately east of House 1.3 (excavated 2005-2006). The material recovered from these excavations most likely included debris that collapsed in from the area just east of the courtyard. The recovered material indicated the house to the east of courtyard 1.4 had a higher grade of ceramics than found elsewhere in courtyard 1.4 and may indicate differential wealth and spatial usage among households within the Area 1 neighborhood.

The tops of all of the walls surrounding Area 1.4 were drawn in order to understand the laying pattern of bricks. It appears that the alternate channels construction method was
employed throughout the area. Profile drawings were also made of each of the courtyard walls in order to indicate brick laying patterns, construction methods, wear, and the articulation of features. Wear on the interior wall faces was evident and suggests heavy usage of the space within the courtyard for a range of activities now lost to us, particularly on the west wall. The south wall of the courtyard had a large round hole that may represent the cavity left by a large timber tie beam. These construction methods point towards a large construction episode for the formation of this area of the site.

Registrar’s Report  (Amanda Moore)

Small Finds and Bulk Finds

The Finds recovered from the 2012 Reading excavations from Amheida Area 1.4 were processed alongside the field excavation. Work was divided between initial identification, bagging and sorting in the field by Liz Mazucci and Hazel Thornthwaite, and further sorting, identification, analysis and recording at the Excavation House by Amanda Moore, assisted by Rory Williams-Burrell. Over 400 inventory numbers were allocated to Finds that were recorded in detail, and all bulk finds from the 32 excavated DSUs were also bulk recorded on Stratigraphic Unit Quantitative Data Forms.

A great variety of objects were recovered from the courtyard space of Area 1.4, indicating the wide range of activities taking place there. Among the more notable groups of Finds were those related to cooking activities, weaving, and children.

14 loom weights and 1 spindle whorl were recovered, along with small fragments of textiles (linen and cotton), indicating weaving and textile activity within the courtyard. 4 of the loom weights were discovered in a cluster in DSU 23, perhaps marking this as an area dedicated to weaving and potentially the location of a loom.

Several fragments of large vessels (either unfired clay, or fabric A4) have been recovered. Some appear to be parts of platters or vessels used in food preparation, whilst others have a broad curved form and areas of burning on them, which indicate they were component parts of bread ovens. Large amounts of charcoal found in the vicinity of these
pieces of fired and unfired clay objects would support the idea that cooking was taking place in the courtyard. Other food and goods related items include a quantity of jar/vessel stoppers, either made from plaster or unfired clay.

Large assemblages of glass and faience have been recovered; in total 273.6 g of glass and 413.3 g of faience; there are a variety of forms and qualities of material. The preservation of organic material recovered has been very good within the courtyard; large numbers of seeds have been found (total weighing 68.1g). DSU 33 yielded a large quantity of dung (possibly camel dung), indicating that this area was used for penning animals at some stage of the courtyard history. Well preserved pieces of wood objects have been recovered, including a wooden comb and spindle whorl. Clustered fragments of egg shell were also recovered from isolated depositions.

Several objects have been found which appear to have some connection to children or gaming activities. A small faience amulet of the god Bes was found in DSU 46; Bes was closely connected with children and women. Also, a quantity of unfired, hand-formed, clay pieces were recovered. Some are disc shaped and appear to be gaming tokens, whilst others appear to be shaped into deliberate, but as yet unidentified, forms. These oddly formed clay pieces need further study, but could possibly be objects used by children as toys; one is reminiscent of a hand shape.

**Painted Plaster**

Numerous fragments of decorated wall plaster have been found within the courtyard, many in DSU 20; they appear to be connected to the collapse of a wall from a building immediately south of the courtyard. Most of the fragments are very small (less than 1cm), but a variety of colours can be observed, including a pale teal-green shade, a pale blue, a light primrose-yellow, and a darker ochre-yellow, maroon, dark red, black and white. The pigment on all the fragments is on a thin layer (approx. 0.45cm thick) of white gypsum plaster.
Some fragments fortunately survived to a greater extent, revealing elements of pattern. These require more detailed study to try to find comparative decorative schemes which they might echo, but the decorative schemes can be grouped as follows:

- several showed bands of black and white over maroon and ochre-yellow backgrounds
- another showed a foliate flourish in pale green above a black base line
- two were white with black flourishes - possibly of a floral or foliage style
- one larger fragment showed the beginning of a pattern with triangular shapes in ochre-yellow and black, with bands of maroon, white and yellow. This could possibly be a fragment of a marble effect design.
- Another fragment had a pale teal-green background colour, with light yellow flourishes and dots on it, and a larger white circle - no pattern was apparent in this fragment.

Ceramicist’s Report (Jane Timby)

Introduction and methodology

The pottery recovered from the 2012 Reading excavations was processed alongside the field excavation by the author assisted by students. Preliminary bulk sorting of the assemblages was undertaken in the field following the standard Amheida practice whereby unfeatured standard fabrics were counted, weighed and discarded in the field and featured, diagnostic sherds bagged up to be taken back for further study. At the end of the season all the pottery recovered from the excavation has been quantified but not all the sherds from the insecure surface contexts have been documented in detail.

In total, pottery from some 41 excavated contexts was processed amounting to some 91,393 sherds weighing 1572 kg. For the featured sherds from secure contexts the rims were coded as far as possible using the system developed by Delphine Dixneuf for the 2007 assemblage from sector 1. Each featured sherd was allocated a form type. Measurements were taken for the diameter of the vessel and the percentage of vessel rim present for the estimation of vessel equivalence (EVE). A note was made of any evidence of use of the vessels in terms of sooting or plaster from construction. The data should
allow a quantitative assessment of the range of different forms in use within the excavated area both horizontally across the courtyard area and vertically down through the stratigraphic sequence. This may determine whether there are any changes which might reflect different activities carried out within the courtyard or changes in the emphasis of different vessels used through time. Several sherds were selected for illustration as the material was recorded; the quantity dictated by the time and man-power available.

Composition
The assemblage is dominated by local coarse wares made in the hard fired, iron-rich fabric fired to a range of grey, brown or orange colours and designated fabric A1a and A1b respectively in the Amheida fabric reference series. The fabric contains quartz sand, ferruginous pellets and variable amounts of visible limestone and was used throughout the Roman period at Amheida. Several of the surface collected sherds comprised distorted waster material clearly derived from the nearby kiln complex. Other fabrics present from the stratified layers include black-surfaced thin-walled cooking wares (fabric B3), buff marl fabrics (B10), shale tempered ware (B3a), brittle ware (A11), and dense limestone-tempered ware (A5). Also present, but excluded from the totals, are several examples of bread plates in organic-tempered fabric A4 which was also used as construction material for bread ovens and other structures.

The pottery recovered from the courtyard includes quite a wide variety of types mainly of a domestic nature with vessels for the preparation and serving of food such as casseroles, dishes and bread moulds; storage vessels, lids, water containers (kegs) and vessels for the dispensing and consumption of liquids. The assemblage is almost exclusively composed of coarse wares with negligible fine wares, other than a small number of lamps and two sherds of red-slipped buff ware. A small number of abraded amphorae sherds have been noted which are probably largely residual and none in the typical Egyptian silt fabric. Most of the pottery was in a fragmented state and no attempt has been made to look for cross-context joins. A small number of vessels with complete profiles were recovered but
these were largely lids and small straight-sided bowls. Several pieces from a single burnt casserole found adjacent to the hearth have potential for reconstruction.

Most of the vessels are plain but a few decorated pieces were noted with painted designs either on the body or as dabs of paint on the rim tops. One lid has an impressed (or incised) complex decorative design.

In general the material recovered from the 2012 excavations is similar to that previously studied by Dixneuf although further work is needed to examine the similarities and differences in more detail. The presence of variants of some of the types defined may highlight a slightly different chronology or the slightly larger assemblage. The emphasis would thus appear to be in the 3rd century but further work is required to clarify the beginning and end of the chronological span.

**Ostraka** (Giovanni Ruffini)

The first ostrakon (341) is unusual for the finds coming from Trimithis so far. It appears to date to 16 Tubi in the 7th year of the reign of Trajan, thus 104 AD. This is considerably earlier than the bulk of the ostraka from both Area 1 and Area 3, which have tended to be late third or fourth century in date. The text is most likely a tax receipt of some kind, although the exact nature of the transaction has yet to be determined. When it is, it will represent one of the first real glimpses of the Roman fiscal regime’s presence in Trimithis in the second century. The second ostrakon (346) is more predictable. It is a well tag, like so many from O.Trim I. It is closest in structure to O.Trim. 1.150, bearing the hydreuma pmoun formula in the first line, a name and patronymic in the second, and a date in the final line. If the date in line 3 is correctly read, the text is most likely from the reign of Constantine I or Constantius II, and thus may date to either 330/331 or 348/349. The third ostrakon (408) is another well tag, clearly recognizable as such from its first line, but not yet fully readable.
Figure 1: Location of Area 1
Figure 2: Plan of Area 1.3 (excavated 2005-2006)
Figure 3: Area 1.4 fully exposed prior to sondages and with trenches indicated

Figure 4: Bread oven and platform (excavated in 2012)
Figure 5: Partial hearth in 2012 trench 1