

The Harbour of Naukratis, 'Mistress of Ships'
The [British Museum Naukratis Project](#)'s fourth fieldwork season at Kom Ge'if, Egypt
(Beheira MSA site no.100253)
April–May 2015

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The port of Naukratis was the earliest, and for a period the only, Greek port in Egypt. Established in the late 7th century BC as a base for Greek (and Cypriot) traders and the port of the royal Pharaonic city of Sais, it was an important hub for trade and cross-cultural exchange long before the foundation of Alexandria. Previous fieldwork by Petrie and Gardner ([1884–1886](#)), Hogarth ([1899–1903](#)) and Coulson and Leonard (1977–1983: Coulson 1996, Leonard 1997, 2001) concentrated on the central areas of the town, and further research is clearly required to fully understand this very important archaeological site.

Since 2012, the British Museum has been engaged in new fieldwork at Naukratis, generously supported by the Honor Frost Foundation, the British Academy (Reckitt Fund), the Institute of Classical Studies, London, and Christian Levett and the Mougins Museum of Classical Art. This work is part of the British Museum wider research project '[Naukratis: Greeks in Egypt](#)', which examines ancient Naukratis in the context of Greek-Egyptian relations (cf. [Villing et al. 2013–2015](#)). Three seasons at the site (October 2012, April 2013, April–May 2014) encompassed geophysical prospection, the creation of a topographic survey map using GPS technology, surface pottery collection, excavation and geological work with a hand auger ([Thomas and Villing 2013](#); 2015 (in press); [Thomas 2014](#); 2015a).

In 2015, a fourth fieldwork season was conducted, during which a grant from the Honor Frost Foundation enabled the team to dedicate resources specifically towards investigating the site's role and development as a port: its waterfront and harbour area, its relation to the river and canal networks, and the infrastructure that enabled Naukratis to operate effectively as a major entrepôt of the ancient world. This year for the first time, excavations were initiated in an area of the site's waterfront which proved extremely productive, yielding with new findings that provide important new insights into maritime activities and trade at Naukratis. Their wider interpretation is informed by a study of maritime aspects of and artefacts from earlier fieldwork.

Fieldwork was carried out at Naukratis over a period of four weeks in April and May 2015 by a team consisting of field director Dr Ross Thomas (British Museum), deputy director Dr Alexandra Villing (British Museum), geologist Mr Ben Pennington (Southampton University), and area supervisors Dr Astrid Lindenlauf (Bryn Mawr College), Mr Edwin de Vries (Amsterdam) and Dr Aurélia Masson (British Museum). Mr Emad Hamdy Abo Ismael, Mr Hany Farouk Shalash, Mr Abd Alhalim Abd Elhameed Mohammed, Mr Essam Saed Aly and Mrs Amal Hamdy Sadek (all Ministry of State for Antiquities [MSA] inspectorate, Damanhur, Egypt) each supervised areas and assisted with the auger survey and finds processing. Additional funding for distinct aspects of the work was provided by the Egypt Exploration Society and Bryn Mawr College. The generous and proficient help of the MSA inspectors, the guards at the site in Kom Ge'if, and the collaboration of the farmers of the villages around Naukratis contributed greatly to the success of this season.

Excavation work was focused on two areas: the area of the Hellenion and the temple of the Dioskouroi in the Greek sanctuary precinct in the northern part of the settlement; and the river front to the west of the site (Fig. 1). In addition, Ben Pennington continued his programme of auger cores (Figs 2–3) investigating the old Canopic branch of the Nile and the ancient environment of Naukratis in general. The season's main objectives were to:

1. Excavate areas in the northern part of the dried-up lake, inside and outside the Greek sanctuary complex of the Hellenion, so as to better understand the Hellenion and its relationship with the neighbouring sanctuary of the Dioskouroi. Published plans of Petrie,

Gardner and Hogarth, in addition to our own earlier work in these areas, suggested these would be rich areas for investigating especially the earliest periods of the site.

2. Undertake geological auger drills within and to the west of the site to provide further detail on the Canopic branch of the Nile, its interface with the harbour of Naukratis and the environment east of the ancient settlement.

3. Instruct MSA inspectors (Emad Hamdy Abo Ismael, Hany Farouk Shalash, Abd Alhalim Abd Elhameed Mohammed, Essam Saed Aly, Amal Hamdy Sadek) in the use of the survey equipment, excavation supervising, recording and finds processing (Fig. 6).

All trenches, structures, features, auger holes and spot finds were located on the local grid using a total station, provided by Penny Wilson (of Durham University, and the Egypt Exploration Society). This local grid had been established in previous seasons using two RTK GPS units (Leica GX1230), which ensures that all survey data are fully geo-referenced and facilitates the incorporation of other survey methodologies into a real-world co-ordinate system. Archival research by the [British Museum's Naukratis project](#) was integrated into the ArcGIS maps used onsite, allowing our selection of trench areas to be informed by the integrated stratigraphic and plan data (when recorded) of the excavations by Petrie, Gardner, Hogarth, Leonard and Coulson. In this way we were able to predict the location of structures and specific phases of occupation on the site.



Figure 1. Satellite image of the north west of the Kom Gei'f lake basin, with the village of Abu Mishfa in the north, showing the location of the 2014 and 2015 trenches (Satellite image © 2013 Google. Satellite image taken on 9 July 2011, modified with data from *The Naukratis Project* © British Museum).



Figure 2 Locations of all augers undertaken at Naukratis to date, by John Gifford (A–D, Coulson 1996, 9; Leonard 1997, 28), Cathleen Villas (SM01–10, 1996), Penny Wilson (A00), and Ben Pennington (A01–A34). Augers A18–A34 were completed in 2015. The blue hatched area represents the ancient river location (Satellite image © 2009 Google. Satellite image taken 28 September 2009, modified with data from *The Naukratis Project* © British Museum).

Geological auger study

The geological auger study conducted by geologist Ben Pennington in 2015 (Figs 2, 3) greatly enhances our understanding of the evolution of the site and the interface between the river and the town, further adding to our knowledge obtained in previous seasons, outlined in our [2014 report](#). Although we had located the Canopic branch of the Nile already during our 2012 and 2013 seasons, we now have a much better understanding of the sequence of events that led to the gradual westward movement of the riverbank, shifting 86 meters over the 1200 years of the site's history as an active port.

An Eijkelkamp hand auger was used to recover subsurface material from 17 points (surveyed via total station) located to the west, east, north and within the ancient settlement. The interpretation of the paleo-landscape was accomplished through the description and analysis of the reconstructed sedimentary sequences. MSA inspectors and local workmen were trained and employed to drill the auger, and cores were brought up in ~20cm chunks for immediate analysis and description. The sediment was recorded in terms of grain size, clast percentage and composition, organic content and form, as well as sorting, rounding and mineralogy where appropriate. A general description of the sediment was also made. Pottery sherds were found in all auger cores (c.460 sherds), and were removed and bagged for identification. This often provided a detailed chronology for the stratigraphy observed.

The data gathered to date confirms the presence of the wide Canopic river channel, some 3 – 5 m deep near the bank and deeper in the middle of the channel located to the west of the site (Pennington and Thomas in preparation). The Canopic channel, during the period when Naukratis was occupied (c. 620BC – AD 650), afforded significantly better navigational capacities than the Alexandrian canal that replaced it during the Islamic period, which was only 1.2m deep (and that only during the annual Nile flood) by the end of the 18th century (Cooper 2014, 68). The river migrated from east to west, with the harbour facilities following, being built progressively at a higher and more westerly location over time. It seems that by the beginning of the Ptolemaic period the riverbank abutting the town started to silt, after which a new river margin was maintained further westwards. Within the 1200 years of the site's occupation, a sequence of Late Period, Ptolemaic, Roman and Byzantine quays, terraces and warehouses can now be pinpointed, ending up over 80 meters to the west of where the original riverfront stood in the 7th century BC.

Understanding this sequence has been crucial also for our excavation strategy, informing the choice of location for Trench 8 (discussed below) which has proved extremely productive, demonstrating the site's outstanding potential for major new discoveries within well preserved waterlogged deposits.

Analysis of the new findings is on-going, as we refine our understanding of the relationship between this dynamic riverine landscape and the development of the settlement, with different environments produced by human intervention caused by the construction of quays and cutting of inlets.



Figure 3 Geologist Ben Pennington undertaking analysis of drilled auger core A32 (© The Naukratis Project, British Museum).

Excavations in the West

In the (north-)western part of the site, at the western edge of the (mostly) dried-up 'lake' area, Trench 8 was opened in 2015 in order to investigate the river bank of Naukratis, especially during the Late Period. Based on the auger results of previous seasons, the western part of the lake basin seemed the most promising area for this. The trench was extended following additional auger cores in the area undertaken by Ben Pennington (see above). Trench 8 extended 16m x 3m east-west (Fig. 4). It revealed the silted up bank and shallow waters of the Canopic river branch just west of the ancient settlement, as well as numerous objects that had been deposited there in antiquity. The finds consisted mainly of 5th to 4th century BC pottery and lamp fragments, with some later layers containing pottery, including many amphora

fragments, dating to the late 4th and early 3rd century BC (Fig. 9). These pottery dumps also contained numerous animal and fish bones, which together with the character of the pottery suggest that the majority of the material was domestic waste from the settlement. Over some of the dumps in the eastern end of the trench a hard concreted bank had formed above a rubble surface. The rubble may have been placed there specifically for this purpose; it was made up of broken fragments of carved limestone blocks and large pottery fragments. Within the waterlogged deposits several terracotta figurines were found, notably representations of the goddess Hathor, of a worshipper carrying a phallus and wine jar, and of a 'Persian Rider', all dating to the 5th – 4th century BC (Fig. 9). The deposits also revealed a carved wooden object in the shape of a phallus (Fig. 9). At least some of these objects could have been ritually deposited in the river during ancient Egyptian festivals relating to the inundation.

Also found within the river deposits were other fragments of worked wood, including a fragment of ship plank with a cut mortice (Fig. 9) and a tenon with dowel hole, probably made of pine and characteristic of Mediterranean ship construction. Having been deposited in the early 4th century BC or before, these finds are important evidence that sea-going Mediterranean ships reached Naukratis during the Late Period. They further add to the corpus of maritime artefacts known from the site, which includes an anchor noted by us in 2012 and a range of shipping gear, including ballast stones, hull sheathing, tacks, and brail rings, that derive from 19th century fieldwork but have only recently been identified (Thomas 2015a).

While research on this complex of finds is still ongoing, some initial remarks on their wider context and significance seem in order. We should perhaps not be surprised to find Mediterranean seagoing ship hull elements (like those found on the modest *Kyrenia*, Steffy 1985) in Naukratis at this early date, long before the popular use of the *ploion hellenikon* across Egypt in the Ptolemaic and Roman periods (Khalil 2012), given that large transports were sailing the Canopic branch even during the period of low water until at least AD 374 (Sijpesteijn et al. 2011, 52–5, 113). As is now confirmed also by our geological work, the Canopic branch provided a major sailing route all year round. We can expect that seagoing vessels with a draft of up to 2m were sailing to Naukratis regularly (contra Höckmann 2008/9), until Alexandria replaced Naukratis as the primary Mediterranean port of Egypt, and that large vessels used in regional trade continued to sail past Naukratis until the settlement's demise in the 7th century AD (Thomas and Villing, 2013; Thomas, 2014, 2015a).



Figure 4 Trench 8 (facing east) with excavator Edwin de Vries. The river bank was originally located in the background, at the east end of the trench (© The Naukratis Project, British Museum).

Excavations in the North

Excavations in 2015 focused on a small area in the north of the dried-up lake of Kom Ge'if (Figs 1, 5 and 7). The objective was to expand the excavations undertaken in 2014 (Trenches 1, 2 and 3) that had revealed the large mud-brick wall associated with the Hellenion, a large sanctuary complex first discovered and partly excavated by David Hogarth in 1899 and 1903.



Figure 5 Plan of the excavations in the Hellenion and Dioskouroi sanctuary area. The plan depicts structures planned and published by Petrie and Hogarth in 1886 and 1903 respectively, overlain by our 2014 and 2015 trenches. Inset in top left: detail of structures in grey box (© The Naukratis Project, British Museum).

Our previous work in this area had revealed rich archaeological deposits containing 6th century BC pottery (local Egyptian as well as numerous imported examples from the Levant, Cyprus, Greece and the East Greek cities in Western Anatolia) and animal bones (particularly jaw and cranium fragments from sheep/goat, cattle and pig); these deposits were found from 0.2m to 1.3 meters below the surface abutting the western (outer) face of a large mud-brick wall built directly upon the 'basal mud'. We found that modern trash layers, lake deposits, pits and fills with mixed material representing the activities of archaeologists (130 years ago) and sebakhin in the 19th and early 20th centuries covered the tops of structures and ancient deposits. Individual mud-bricks were not usually identifiable, as the whole area had been covered by a lake between 1903 and 2011 and because the bricks were entirely clean of

artefacts, being built on and made of virgin soil not containing any residual pottery material. The wall was slightly sandier, however, than the basal mud. Numerous layers of mud mortar, slightly sandier than the wall, were added to the outside of the wall, more thickly at the base, thus producing a slight slope.

Just north of the previous year's trenches we opened in 2015 four new 2 m wide trenches separated by a 1 m baulk (from the west: Trench 9, 8m x 2m; Trench 10, 8m x 2m; Trench 4, 12m x 2m; Trench 5 5m x 2m). Spanning 36m east–west, the trenches covered an area from within the Dioskouroi sanctuary, first excavated by Petrie, to well within the Hellenion sanctuary complex. The aim was to investigate early phases of the Hellenion and the sanctuary of the Dioskouroi and associated structures.

Well within the Hellenion we opened two trenches (from the north: Trench 7, 8m x 5m; Trench 6, 5m x 2m) running north-south, up to the place where two large granite stones lie, fragments of a door jamb originally discovered and surveyed by Hogarth. Our objective was to tie our own stratigraphy into Hogarth's, which was based upon the virgin soil 'basal mud' level on which he claimed to have left the door jambs in 1903 and on which he claimed the sanctuary complex was built.

Trenches 6 and 7 revealed a surface of mixed pottery representing the bottom of Hogarth's excavations, under which were found large deposits of sloping mud-brick tumble containing very little Egyptian pottery. These seem to have been fills intended to create a platform or foundation on which the earliest phases of the Hellenion were built. As these fills sloped steeply away from the north, west, east and southern baulks of Trench 7 and away from the northern baulk of Trench 6, they may have been contained within mud-brick walls beyond the limits of excavation, suggesting a form of casemate structure common in Late Period Egypt.



Figure 6. Trenches 4 and 10 in the Hellenion and Dioskouroi area (facing west), with inspectors Hany and Essam supervising excavations (© The Naukratis Project, British Museum).

Trench 4 revealed the damaged core of the ‘temenos wall’ excavated last year (Fig. 5). This was much smaller than expected, being heavily robbed out from its western face. It contained mud-brick rubble, filled to the top level of the wall, as also seen in Trenches 6 and 7; thus the ‘temenos wall’ here appears to have functioned as the western limit of a platform, probably delimited by mud-brick walls all round and backfilled with mud-brick rubble. A small wall running perpendicular to the ‘temenos wall’ was found in Trench 5 (Fig. 5). The area beside the wall was also backfilled with rubble. As the ‘temenos wall’ and the internal wall were both built on rough rubble without any floor surfaces (and not on the natural basal mud), this is further evidence that at least some structures in the Hellenion rested on a substantial platform rather than having been built directly on virgin soil (as seen in Trench 1 last year). The building of such platforms was a massive undertaking that was achieved utilising techniques and technology well known from Egyptian casemate structures of the Late Period.

Outside the Hellenion, in the direction of the sanctuary of the Dioskouroi (to the west), excavations uncovered further evidence for Greek religious practices. In Trench 10 (Figs 5 and 7), a small mud-brick platform was found. Immediately to the west of the ‘temenos wall’, and built of the same size bricks (c. 16cm x 12 cm x 10cm), this structure preserved evidence of burning on its eastern end. It may have served as a platform for an outdoor altar, though this cannot be ascertained without further investigation to the north. A group of finds uncovered immediately to the south of this platform included Greek, East Greek, Cypriot, Phoenician and Egyptian pottery fragments of the 6th century BC and fragments of two Cypriot limestone figures representing female dedicants and dating c.620–550BC (Fig. 8). The deposit also contained animal bones, including the cranium of a ram. This was a continuation of the deposit excavated within Trench 1 in 2014, which had produced similar objects (including a Cypriot mortarium with a Greek inscription and an Egyptian terracotta figurine).



Figure 7. Photograph facing east of the mud-brick platform outside (to the west) of the Hellenion in Trench 10. Trench 4 in the background. Note the quartzite sarcophagus beside the trench, probably originally from the cemetery under Abu Mishfa to the north (© The Naukratis Project, British Museum).

Further to the west, Trench 9 cut through an area that, based on Petrie’s plans, should have contained the enclosure wall of the sanctuary of the Dioskouroi. No trace of this wall was found and it is possible that this is no longer preserved in this area, although it may still exist

elsewhere, such as under the high ground and the modern road to the north of the trench. Trench 9 did reveal, however, a fragment of a tridacna shell (c.620–550BC) and a terracotta head (c.340–250BC) that may relate to religious activities in this area. The find of a tridacna shell (either *Tridacna squamosa* or *Tridacna maxima*) is of special interest, since these are indigenous to the shallow reefs of the warm Indo-Pacific sea, the Red Sea being the closest source. Several decorated shells were discovered at Naukratis also in earlier fieldwork (Petrie 1886, 35–6, pl. XX, 10–12, 16; British Museum 1886,0401.1596; 1886,0401.1597; Ashmolean Museum, Oxford, AN1896-1908-G.451). Carved, incised and painted in the Levant during the period c.630–580BC (Brandl 2001), decorated tridacna shells were exported across the Mediterranean and have also been found in the Greek sanctuaries at Samos, Lindos and Cyrene.

Direct evidence for the worship of the Dioskouroi was discovered in Trench 10, where a dedication on an Ionian cup dating to the 6th century BC bore an incised Greek dedication to these deities (Fig. 8). Finds from the upper, mixed levels in this area include a terracotta mould for the making of coffin-fittings in the shape of a Medusa head dating to c.330–250BC (Fig.8). This provides confirmation for the existence of this industry at Naukratis, the site that yielded the greatest number of known examples of this type of fittings in Egypt (Thomas 2015d). Further finds include other Hellenistic objects, such as stamped amphora handles and lamps (Fig. 8).

Pottery and small finds

Pottery and small finds were recovered from all trenches and auger cores. Well over 7000 diagnostic artefacts were recorded this season, compared with over 4000 in 2014. All were identified and recorded, whilst a selection of over 700 were washed, drawn, photographed and stored for future reference and study. The majority were recovered from the excavations of the river front (Trench 8); finds from the northern area of the Hellenion and Dioskouroi sanctuaries (Trenches 4–7, 9–10) come primarily from surface deposits plus the lower levels of Trench 10.

In addition, c.460 micro-sherds were found in the auger holes drilled by Ben Pennington and stored for future study; they enabled the dating of the geological and archaeological sequences represented in these cores, particularly useful for dating different episodes of the use, silting up and relocation of the river harbour in the Late Period, Ptolemaic, Roman and Byzantine periods.

All indicator sherds (rims, bases, handles) were quantified on site, with a limited number of significant pieces retrieved for further study. All body sherds from stratified ancient deposits were also quantified before being returned to the site.

In the north the recovered material comes from very different types of context. The pottery from the surface included material re-deposited by the activity of the seabakhin, early excavations by Petrie and Hogarth, as well as more recent dumps. This included some 7th to 5th century BC material, but, as in the previous season, consisted predominantly of 4th century BC to 7th century AD objects, with some modern material also.

Within the sealed archaeological deposits under these disturbed layers, an assemblage of late 7th to 6th century BC finds was found in Trenches 4 and 5, contemporary and similar in variety to what was found last year in Trench 1. Imports were identified from Athens, Corinth, Cyprus, Lebanon, Miletos, Chios, Samos, Thasos, Lesbos, Rhodes and other Aegean and East Greek areas. Some of the material is characteristic for Greek religious and dining practices and was found alongside animal bones, which were well attested especially in the previous season and indicated also in Petrie's and Hogarth's fieldwork.



Figure 8. Objects from Trenches 4, 5, 9 and 10. Top row dating to the late 4th and 3rd century BC, remainder to the 6th century BC. From top left: Medusa coffin-fitting mould, N15.4.4.5; Rhodian stamped amphora handle, c.200 BC, N15.5.1.1; head of locally made Tanagra style figure with hair worn in sakkos, N15.9.1.6; head and lower body of Cypriot limestone statuettes of female dedicants, N15.10.5.10 and N15.10.5.2; Ionian cup fragment with graffito dedication to the Dioskouroi, N15.10.5.1; East Greek terracotta fragment of a seated woman, N15.10.2.1 (© The Naukratis Project, British Museum).

The most significant finds from these trenches include an Ionian cup with a dedication to the Dioskouroi (Fig. 8 middle), two female Cypriot limestone figures (Fig. 8, bottom left), and two Greek terracotta female figures (Fig. 8, bottom right). The unusually complete dedicatory inscription further adds to the small corpus known of dedications to the Dioskouroi as patrons of seafarers known from Naukratis ([Johnston 2013-2015](#)). The further exploration of the well-preserved layers relating to their cult promises new insights into the exceptionally early and prominent worship of these maritime gods. The Cypriot fragments belong to two different plaque figures representing female dedicants, a head and a lower body; both have flat unworked backs and show some traces of black and red painted decoration, as is characteristic for Cypriot work of the period c. 620–560BC. The head shows the woman's long hair covered by a veil, falling behind her large ears down the back of her neck and behind her shoulders; the top of her head is flattened. The lower body fragment preserves parts of a long dress (*chiton*). Both figures were probably originally depicted holding an offering such as bowl, saucer, lamp, bird, flower, calf or tambour. Found exclusively within Greek sanctuaries at Naukratis, these figures have many parallels on Cyprus, but were also dedicated in Greek sanctuaries such as at Samos, Miletos or Knidos ([Thomas 2015b](#), 14–15). One of the Greek terracotta figures is an early example of a female 'Tanagra style' figure with her hair worn in sakkos that was made locally at Naukratis. Such figures were produced at Naukratis from the beginning of the Hellenistic period, as is attested by finds of moulds and workshops. Products of these workshops have been found both within houses and Greek sanctuaries at Naukratis ([Thomas 2015d](#)).



Figure 9. Objects from Trench 8 dating from the late 5th to mid-4th century BC. From the top left: Hathor figure N15.8.19.1; Persian rider figure N15.8.19.1; Cultist of Harpokrates/ Hor-Par-Chered N15.8.20.1; Attic red figure squat lekythos N15.8.15.23; Thasian stamped amphora handle depicting Eros N15.8.2.52; Ship plank with mortice cut in top left N15.8.8.28, subsequently sawn; wooden phallus N15.8.20.2 (© The Naukratis Project, British Museum).

In the western area a very similar disturbed deposit was excavated in the upper layers, containing pottery dating from the late 7th century BC to the 7th century AD. Below this a very different assemblage was found, including stratified deposits of the later 5th and early 4th century BC under 4th to early 3rd century BC contexts. Some residual 6th century BC material was found to be mixed within this assemblage. The assemblage included significant quantities of Attic black glaze fine ware and a few lamp and red-figure pottery fragments (Fig. 9). Local cooking pots in both Egyptian and Greek style were found alongside numerous crude storage basins, bread platters, dishes and a wide variety of Phoenician, Cypriot, mainland Greek and East Greek amphorae.

Three Egyptian terracotta figurines of the Persian period and a wooden phallus were found in the eastern part of this trench. It is possible that they were purposefully deposited into the river Nile, such as during Egyptian religious rituals associated with inundation ceremonies (Thomas 2015c, 54). The ‘Persian Rider’ and the figures of the goddess Isis-Hathor within a shrine and of a male cultist holding a wine amphora and a model of a phallus are all common figure types of the Persian Period and 30th Dynasty, c. 500–330BC (Thomas 2015c), although rarely published from well dated archaeological contexts such as this. Our on-going study of the hundreds of indicator sherds from this deposit, including many Attic fine-ware imports (of types already extensively researched), will no doubt help to further refine the dating of these examples.

One of the most significant finds made in this trench is a sawn fragment of ship timber (Fig. 9). The construction technique of mortice, tenon and dowel fixings is a well-known Greek technology. As this piece was apparently reused before being deposited in the late 5th or early 4th century BC, it is probably from a ship that was constructed and used during the Late Period. This find is further confirmation that the port of Naukratis received seagoing ships during this period, and that the Canopic branch must have been navigable for such ships for at least part of the year.

Near Trench 8, a small limestone altar or incense-burner was found on the surface, probably dating to the Ptolemaic period (Fig. 10), for which there are parallels already known from Naukratis (British Museum 1886,0401.1567 and 1909,1201.4; Harrogate, Mercer Art Gallery HARGM10099).



Figure 10. Small limestone altar or incense burner fragment, probably from the Ptolemaic period, found south of Trench 8 (© The Naukratis Project, British Museum).

Summary

The work of the 2015 season has produced significant new data on the topography of ancient Naukratis, its local environment, as well as important stratigraphic and dating evidence for the site's development. For the first time in the history of the site, an area of the river bank near the harbour of Naukratis has begun to be excavated in a systematic manner, revealing substantial amounts of 6th, 5th, 4th and 3rd century BC material predominantly in layers of the late 5th to early 4th century BC. While most of the material is of likely domestic origin, the discovery of figurines may represent evidence for Egyptian religious practices relating to the river. The discovery of a ship plank confirms the presence of seagoing Mediterranean ships at Naukratis.

Excavations in the Greek sanctuary area shed new light on the location and early building history of the Hellenion and the adjacent cult of the Dioskouroi, patrons of sailors, which is now securely located by the find of an East Greek cup with a dedication. Numerous finds confirm Greek religious practices taking place in this area and underline the international nature of the votives offered to the gods at Naukratis, including figurines from Cyprus.

We now have a much better idea of the extent of the ancient site, the location and development of the Canopic branch of the Nile, and a better understanding of the archaeology of the site. In the northern part, over a meter of archaeology is still extant in places, preserving evidence for early religious practice, whilst to the west over two meters of waterlogged river deposits preserve rich archaeological remains and rare organic finds that are important evidence for the settlement's central role as the Mediterranean port of Egypt during the Late Period. The stratified assemblage from the area between the Dioskouroi sanctuary and the Hellenion, continues to provide new insights into the full archaeological spectrum of the site as well as early religious practices, indicating closer links with Cyprus, Phoenician and the Levant and a greater degree of cultural mixing between Greeks and Egyptians than previously thought. The results highlight the need for, and great potential of, further research and especially fieldwork, whilst providing significant new insights relevant to a range of disciplines.

References

Brandl, B. 2001, 'Two Engraved Tridacna Shells from Tel Miqne-Ekron', *Bulletin of the American Schools of Oriental Research*, 323, 49–62.

Coulson, W.D.E. 1996, *Ancient Naukratis, II/1, The Survey at Naukratis*, Oxford: Oxbow.

Cooper, J.P., 2014, *The Medieval Nile: Route, Navigation, and Landscape in Islamic Egypt*. The American University in Cairo Press, Cairo.

[Gardner, E.A. 1888, *Naukratis. Part II \(Sixth Memoir of the Egypt Exploration Fund\)*, London.](#)

Hogarth, D.G., Edgar, C.C. and Gutch, C. 1898–9, ‘Excavations at Naukratis’, *The Annual of the British School at Athens* 5, 26–97.

Hogarth, D.G., Lorimer, H.L. and Edgar, C.C. 1905, ‘Naukratis 1903’, *Journal of Hellenic Studies* 25, 105–36.

Höckmann, O. 2008/9, ‘Griechischer Seeverkehr mit dem archaischen Naukratis in Ägypten’, *Talanta* 40/41, 73–135.

[Johnston, A.W. 2013–2015, ‘Ceramic inscriptions’, in Villing et al. 2013–2015.](#)

[Khalil, E., 2012, ‘The ploion hellenikon of Roman Egypt: What was Greek about it?’, *British Museum Studies in Ancient Egypt and Sudan* 19, 39–50.](#)

Leonard Jr., A. 1997, *Ancient Naukratis. Excavations at a Greek Emporium in Egypt, I, The Excavations at Kom Ge’if* (The Annual of the American Schools of Oriental Research 54), Boston.

Leonard Jr., A. 2001, *Ancient Naukratis. Excavations at a Greek Emporium in Egypt II, The Excavations at Kom Hadid* (The Annual of the American Schools of Oriental Research 55), Boston.

Sijpesteijn, P.J., Worp, K.A., Gagos, T., Verhoogt, A., 2011, *A Transportation Archive from Fourth-century Oxyrhynchus (P. Mich. XX)* (American Studies in Papyrology 49), Durham, NC.

Pennington, B. and Thomas, R. I. (in preparation), ‘Paleoenvironmental survey at Naukratis and the Canopic Branch of the Nile’.

[Petrie, W.M.F. 1886, *Naukratis. Part I, 1884–5 \(Third Memoir of the Egypt Exploration Fund\)*, London.](#)

Steffy, J. R. 1985, ‘The Kyrenia ship: An interim report on its hull construction’, *American Journal of Archaeology* 89.1, 71–101.

[Thomas, R. I. 2014, ‘Roman Naukratis in its Alexandrian context’, *British Museum Studies in Ancient Egypt and Sudan* 21, 193–218.](#)

Thomas, R. I. 2015a, ‘Naukratis, ‘Mistress of ships’, in context’, in D. Robinson and F. Goddio (eds), *Thonis-Heracleion in Context* (Oxford Centre for Maritime Archaeology Monograph 8), Oxford: Oxford Centre for Maritime Archaeology, 247–65.

[Thomas, R. I. 2015b, ‘Cypriot figures in terracotta and limestone’ in A. Villing et al. 2013–2015.](#)

[Thomas, R. I. 2015c, ‘Egyptian Late Period figures in terracotta and limestone’, in A. Villing et al. 2013–2015.](#)

[Thomas, R. I. 2015d, ‘Ptolemaic and Roman figures, models and coffin-fittings in terracotta’, in A. Villing et al. 2013–2015.](#)

[Thomas, R. I. and Villing, A. 2013, 'Naukratis revisited 2012: Integrating new fieldwork and old research', *British Museum Studies in Ancient Egypt and Sudan* 20, 81–125.](#)

Thomas, R. I. and Villing, A. 2015 (in press), 'Return to Naukratis: New fieldwork at Kom Geif, 2012-14', *Annales du Service des Antiquités de l'Égypte*.

[Villing, A., Bergeron, M., Bourogiannis, G., Johnston, A., Leclère, F., Masson, A. and Thomas, R. with D. von Recklinghausen, J. Spencer, V. Smallwood, V. Webb and S. Woodford 2013-2015, *Naukratis: Greeks in Egypt*. British Museum Online Research Catalogue.](#)