

ARCHAEOLOGICAL FIELDWORK REPORTS

<HL1>THE ROMAN PORTS PROJECT<HL1>

<HL2>THE PORTUS PROJECT (COMUNE DI FIUMICINO, PROVINCIA DI ROMA, REGIONE LAZIO)<HL2>

The Portus Project (www.portusproject.org) is an initiative directed by Simon Key that aims to understand better the development of the port and its broader relationship to the Mediterranean. It involves close collaboration between the British School at Rome, the University of Southampton, the *Soprintendenza Speciale per il Colosseo, il Museo Nazionale Romano e l' Area Archeologica di Roma*. (SS-Col), the Universities of Cambridge, Lyon and Aix-en-Provence, and the *Parsifal Cooperativa di Archeologia* (Rome). The Arts and Humanities Research Council has been the principal funder of the project (2007–14), while additional funds have come from the British School at Rome, the University of Southampton and the SS-Col. Particular gratitude is expressed to Dott. Renato Sebastiani for his collaboration in co-directing the excavations undertaken in the summer of 2015. This fieldwork activity was funded by the Portus Field School (June–July), a Portus Project initiative funded by the University of Southampton and involving collaboration with the SS-Col, *Parsifal Cooperativa di Archeologia* (Rome) and the Comune di Fiumicino.

<HL3>EXCAVATIONS AT PORTUS<HL3>

<HL4>*Palazzo Imperiale*<HL4>

Fieldwork in summer 2015 saw a continuation of the work on the *Palazzo Imperiale* that had begun in 2012 and continued during 2013 and 2014. This is a 3.4 ha structure that is located upon an isthmus at the centre of the port, affording its occupants very clear views over the Trajanic and Claudian basins. It was established under the Emperor Trajan and was abandoned at some time during the Byzantine period. This eighth season was focused upon the range of rooms along the northern side of the complex, from the *Castellum Aquae* in the east (Building 1), westwards. Our fieldwork, part of a joint strategy of excavation and restoration, the latter being coordinated by the SS-Col, is investigating a zone (Area K) that lies on the western side of the early twentieth-century path that bisects the complex from north to south. This is a challenging part of the site, since it involves excavation of a partially standing structure, with archaeological remains on two storeys.

<HL5>*Building 3*<HL5>

This rectangular *opus testaceum* room, initially uncovered in 2009 (Area D), was situated on either side of the twentieth-century path that bisects the complex. The excavations (Area K) in 2012, 2013 and 2014 revealed the full eastward extent of its walls, its internal layout around a central peristyle and *opus spicatum* flooring, and also paid particular attention to the

south-eastern sector of the room, revealing the stumps of the square pilasters that carried the vaults of the first-floor room above and confirming its rectangular peristyle-like structure.

The 2015 work continued to try and resolve the sequence of activities in the western part of Building 3 in an area on the northern side of the piers that defined the northern side of the peristyle, the doorway that provided access into the western corridor (Building 8.3) of Building 8 and the 20th path to the east. Careful excavation of a small lead-smelting furnace robbed in the later 6th c (Period 6C) and an earlier repair trench (Period 4) cut into the Trajanic (Period 2) *opus spicatum* floor not only enabled us to better understand the later history of this part of the *Palazzo Imperiale*, but also shed light on the position of the Claudian (Period 1) quay that preceded the construction of the Trajanic building. The rear face of the quay was discovered immediately below the Period 2 *opus spicatum* floor on the north side of the cut of the trench close to the 20th c path. This can be related to the stretch of Claudian quay discovered on the eastern side of the 20th c path. Overall it suggests that the alignment of the northern side of the *Palazzo Imperiale* followed the Claudian quay much more closely than was previously thought, and this has important implications for our understanding of the originality of the Trajanic building.

Excavation in 2015 also continued on the southern stretch of the ground floor of the north-south corridor with sloping concrete floor (Room 8.3) that separated the rooms of Building 8 from Building 3 to the east. In particular, the fill of the small square structure of late 3rd c AD date (Period 4) without an entrance that was built directly onto the surface of the corridor and abutted the east wall of Building 3 was removed in an attempt to learn more about its function. It would appear that it was backfilled with ceramics and other rubbish at some time in the 4th to early 5th c AD (Period 5). One key find was an imperial lead stamp of late 2nd c AD date of the kind used on marble blocks imported from Imperial quarries, and which were a frequent find on blocks from the *statio marmorum* on the north side of the Isola Sacra. This is the first time that one has been found in a non-quarry or marble-yard context, and is good evidence for the kinds of administrative activities that would have taken place in the *Palazzo Imperiale*.

<HL5>*The South Side of the Palazzo Imperiale*<HL5>

Excavation continued on the south side of Room 8.13 (Area E), a corridor that was originally identified on the basis of the results of the 1998-2004 geophysical survey, and excavations in 2009 and 2014. The work uncovered the full extent of the 4th to earlier 5th c (Period 5) black and white geometric mosaic uncovered in 2014. It was composed of large tesserae, was badly conserved and was cut by two intersecting narrow trenches that ran from north to south and east to west to form a cross-shaped plan; the former presumably served as a slot for a wooden partition in the late 5th c AD (Period 6A), while the latter was subsequently created in an attempt to remove lead piping. A small sondage in the north-eastern corner of the room revealed the Period 2 white mortar floor and two steps at the angle of the doorway from corridor 8.13 into the north-south corridor 8.3. This discovery provides us with key

information about how the inhabitants of the *Palazzo Imperiale* were able to move between the internal spaces and the Open Area to the south of the complex.

<HL5> *The Seafront* <HL5>

Work continued on the north side of Building 3 (Area K), the seafront of the *Palazzo Imperiale*. Removal of the rubble deriving from the collapse of the northern façade of the complex and underlying sand, revealed a very rich organic layer filled with sea-shells that represented the final infilling of this sector of the Claudian basin. The concrete platform uncovered in 2014 was also investigated, removing the uppermost level and revealing similar organic deposits.

<HL4> *Building 5 (Navalia)* <HL4>

Building 5 lies immediately to the south of the excavated part of the *Palazzo Imperiale*, and formed part of the same original architectural concept. Fieldwork undertaken in 2011 and 2012 (Keay *et al.*, 2012) revealed that it was a vast, single building measuring 240 × 58 m that was organized into a series of regularly spaced parallel spaces oriented from north to south. Each of these was in turn subdivided in a consistent sequence: a passage 4 m wide, three narrow bays each *c.* 11 m wide, a passage 4 m wide, and a wide bay *c.* 19 m wide. All of these building sections opened on to a quayside bordering the Claudian basin to the north and on to a quayside bordering the Trajanic hexagonal basin to the south. Previous fieldwork revealed that the building was established under Trajan (Period 2), when it seems to have had some kind of ship repair or construction function, and that in the later second century AD some sections of it were sub-divided into a large rooms oriented from west to east (Period 3) that continued in use until at least the later fifth century AD.

The 2015 excavations continued in Sondage 2, which ran from west to east across the narrow bay B5.2/NB4. The aim was to continue efforts begun in 2014 to uncover the full sequence of deposits down to foundation levels in order to reveal the character of the original Period 2 Trajanic flooring, and thereby to better understand the function of the bay. The excavations revealed further evidence for the deposits underlying the later 2nd c AD (Period 3) rammed cocciopesto floor. It is now clear that the Period 2 Trajanic flooring was composed of sand dumped across the full width of B5.2/NB4, while the activity associated with this primary phase (Period 2A) was a series of stake-holes on the eastern and western sides of the bay, as well as a series of stake supports and abrasions running down the middle. As in 2014 bronze and iron tacks abounded in the fill of these features and on the floor surface. Once the Period 2 sand was removed, excavation uncovered an underlying white mortar levelling surface that was perforated by a slot and stake-hole; these were related to the initial construction of the walls and piers of B5.2/NB4.

<HL2> PORTUSLIMEN. THE ROMAN MEDITERRANEAN PORTS PROJECT (ROMP)
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This project, which runs between 2014 and 2019 is funded by the ERC and focuses upon the organization and scale of pan-Mediterranean commerce during the first three centuries AD (www.portuslimen.org). It applies techniques that have been developed in archaeology, ancient history, geomorphological studies and computing to a range of 32 ports across the Mediterranean, ranging in scale from Portus, to regional entrepôts and down to smaller ports. It represents a key collaboration between the University of Southampton, the BSR, the Université la Lumière Lyon 2, the *Deutsches Archäologisches Institut* (Istanbul), the *Österreichisches Archäologisches Institut*, the *Soprintendenza Speciale per il Colosseo*, *il Museo Nazionale Romano e l' Area Archeologica di Roma*, the *Soprintendenza Archeologica di Napoli*, the *Institut Català d'Arqueologia Clàssica*, the Universidad de Cádiz, the University of Oxford and the University of Cologne, amongst others. Central to the project is a programme of geophysical survey and geo-archaeological at seven sites.

In 2015-16 the BSR/APSS geophysics team returned to western Turkey to survey two small Hellenistic ports that served Pergamon: Pitane and Kane. The geophysics work forms part of the ongoing research by the DAI Istanbul, directed by Dr Felix Pirson, Director of the DAI. Pitane occupies a rocky promontory on the southern side of the Kane peninsula, the natural topography of which offers at least two sheltered harbours or anchorages. The settlement at Pitane was well-known for its production of Çandarlı Ware (Eastern Sigillata C) which was exported all over the Mediterranean during the 2nd and 3rd centuries AD. The gradiometer survey of the promontory hoped to identify the pottery production areas, in particularly the kilns. While the results of the surface collection showed a high proportion of kiln-related material and Çandarlı Ware sherds, the gradiometer survey did not identify the production sites although one kiln may be visible. A small gradiometer survey was undertaken at Kane, building on the previous year's results. On the steep slope of the outcrop to the south of Kane, some large hewn blocks of stone had been observed on the ground surface and were presumed to be evidence of the town wall. The geophysics survey enabled the mapping of a short stretch of the course of the buried city wall. This has helped confirm the extent of the ancient settlement to the south, and together with geo-archaeological survey undertaken by the University of Cologne as part of the project, suggests that the Kane peninsula may have originally been an offshore island. This, together with the discovery of a quay in an underwater survey by the University of Kiel on the south-western side of the peninsula, has significant implications for our understanding of the character of the port.

References

Keay, S., Earl, G., Felici, F., Copeland, P., Cascino, R., Kay, S. and Triantafillou, C. (2012) Interim report on an enigmatic new Trajanic building at Portus. *Journal of Roman Archaeology* 25: 484–512.

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Illustrations

1. Portus View of the Period 5 black and white geometric mosaic floor in the corridor 8.13 of the *Palazzo Imperiale*
2. Portus Detail showing the curved rear face of the Period 2 Claudian quay (centre) in the trench cut through the Period 2 Trajanic *opus spicatum* floor in Building 3 of the *Palazzo Imperiale*.