FASTIONLINEDOCUMENTS&RESEA

The Journal of Fasti Online (ISSN 1828-3179) • Published by the Associazione Internazionale di Archeologia Classica • Palazzo Altemps, Via Sant'Apollinare 8 – 00186 Roma • Tel. / Fax: +39.06.67.98.798 • http://www.aiac.org; http://www.fastionline.org

Excavations at the so-called Villa di Tito, Castel Sant'Angelo (RI), May to June, 2022

Martin Beckmann - Myles McCallum - Matthew Munro -Rebecca Payne - Simone Nardelli

The most recent excavations by Saint Mary's University and McMaster University at the so-called Villa di Tito (RI) began in 2018 and continued in 2019. After a two-year pause due to COVID, research began at the site again in 2022. The goal of excavations in 2022 was to continue the exploration of the terraced area of the villa, in part to determine definitively if the structure was indeed a Roman-period villa as opposed to a bath complex and to better understand the structure's plan. We also wanted to dig a small test-trench in the structure's lower-level, the cryptoporticus, to determine the degree of disturbance and archaeological preservation after restoration to the structure carried out in the 1980s. Excavation of the terraced part of the structure revealed the use of earthen architecture (pisé or cob) alongside the use of wooden framing elements in what appears to be a food preparation and storage area (Rooms 8a and b). We also found further evidence for the substantial restructuring of the villa in the early to middle part of the first century CE, which included the infilling and abandonment of a well, built over by Room 8b. Within the well, we appear to have recovered some elements of a votive deposit likely associated with its decommissioning. We also arrived at the first century CE floor level in Rooms 9 and 10 and found good evidence that Room 10 was renovated at some point in the first or early second century CE, which included blocking doorways connecting Room 10 to Room 9 and the yet-unexcavated Room to the west of Room 10. Within the concrete floor of Room 10 we also discovered evidence for what appears to be the post-destruction salvaging of materials from the site; the outline of two holes dug into the floor were defined and await excavation next year. Within the cryptoporticus, we found a relatively intact collapse layer or the area's ceiling and the storey that once sat above it, as well as what may be the top of a small staircase descending to a lower level within this part of the villa. Artefactual evidence from the cryptoporticus suggests that the structure suffered a terminal collapse event sometime in the late first to mid-second century CE. The absence of any African Red Slip pottery points more strongly to a first century CE date for this event.

Introduction

After a break caused by the pandemic, excavation continued in May and June of 2022 at the so-called Villa of Titus by a combined St. Mary's and McMaster Universities team¹. Our primary goals for the season were:

- 1. To recover more of the building's plan.
- 2. To find dating evidence for the structures uncovered in 2019.
- 3. To identify the functions of the rooms identified in 2019.
- 4. To continue work on restoration of the structure started in 2018.
- 5. To expand our 3D model of the architectural remains.

Our efforts this year have produced a much-improved understanding of the occupational history and chronology of the site and indicate that its main phase of use was during the 1st century CE.

¹ For the report of the previous season, see MCCALLUM et al. 2020.

History of Research at the Site

The Villa of Titus is a Roman terraced villa overlooking the Velino River valley, located in the Lazio region of the *comune* of Castel Sant'Angelo, in the province of Rieti (figs. 1 and 2). The villa occupies a natural limestone terrace north of the Velino River, facing the karstic Lake Paterno, probably the ancient *lacus Cutiliae*, a site sacred to the Sabine goddess Vacuna. The site, clearly visible since its abandonment in antiquity, has been the subject of previous archaeological and historical investigations (fig. 3). It was first identified by Persichetti and other 19th-century archaeologists as a bath complex, based on the presence of an ornamental fountain within the structure, no longer visible today².

Excavations at the site in the late 1970s revealed a cryptoporticus in the southeastern corner of the terraced structure with chambers and remains of the floor. Restorations during the 1980s shored up the terrace and the southern concrete wall, and more cryptoporticus was identified, particularly the eastern entrance and some interior spaces in the eastern sector.

Between 2010 and 2011, under the direction of Dr. Giovanna Alvino, several sectors of the terraced structure were excavated³. These investigations revealed that the site was not a bath complex, as previously thought, but more likely a residential structure, i.e., a Roman-era villa built in the first century BCE, as suggest-



Fig. 1. Map showing the location of the Villa of Titus within Central Italy. Map courtesy of Will Flanagan, Saint Mary's University.

² PERSICHETTI 1893: 168.

³ ALVINO 2014.



Fig. 2. Map showing locations of the Villa of Titus and the Baths of Vespasian within the Velino Valley. Red lines indicate modern roads. Map courtesy of Myles McCallum.



Fig. 3. Drone photomosaic of the Villa of Titus seen from the southeast. Greg Baker, Saint Mary's University.



Fig. 4. Plan, Villa of Titus excavations, 2022, with room numbers indicated. Plan courtesy of Marco di Lieto, independent researcher, and Matthew Munro, University of Calgary.

ed by the building techniques employed and the decorative elements. These excavations uncovered a series of rooms (Rooms 1-7 in our plan below, fig. 4, and fig. 5) in the northeastern corner of the terrace, one of which, Room 3, has a geometric black-and-white mosaic, the creation of which can be related to the building renovation program mentioned above. GPR surveys conducted by Piro and Zamuner in 2010/2011 revealed the presence of an apse within the structure, which roughly corresponds to the one excavated in 2018 and 2019 (our room 10) and identified at least one large building in an olive grove located northeast of the structure⁴.

Our excavations at the site began in 2018 and continued in 2019. We were unable to continue in 2020 or 2021, during which time we contracted with the BSR's geophysics unit (Stephen Kay and Elena Pomar) to conduct geophysics work at both the Villa of Titus and the nearby Baths of Vespasian (Terme di Vespasiano). We returned to the villa in 2022.

During our excavations at the Villa of Titus in 2018 and 2019⁵, we exposed a line of rooms on the northern limit of the building, abutting the edge of a limestone escarpment rising to the north. Our excavations added another four rooms or interior areas to the overall plan of the villa (fig. 4). Unfortunately, due to the presence of 19th and 20th century agricultural terraces on the site, a small forest, and in places almost five meters of overburden, we only managed to reach a concrete floor level in Rooms 6 and 8 during the last few days of excavation in 2019. Fortunately, Room 5, to the east of Room 8, which had been included by Alvino's team in their excavation plan, had been excavated down to a floor fill which we were able to date to the first half of the first century CE⁶. In Room 10, our progress was also slowed by the presence of a Lombard period (seventh and eighth century CE) reoccupation, essentially a small hut with a hearth, within the abandoned Roman building, which reused its building materials. During conservation work at the site in 2018, we noted that the mosaic in Room 3,

⁴ PIRO, ZAMUNER 2014.

⁵ MCCALLUM, BECKMANN *et al.* 2019 and 2020.

⁶ MCCALLUM, BECKMANN et al. 2019.



Fig. 5. 3D model of 2022 excavations, Rooms 8 to 10. Model courtesy of Marco di Lieto, independent researcher.

excavated by Alvino's team, had a series of postholes dug into it in a roughly apsidal pattern⁷. While there was no datable material in these holes, it seems likely to us that they date to this Lombard period as well, possibly when the structure was reused as a shelter for shepherds and their flocks.

Historical Context

The Velino Valley has been an important corridor between the Apennine highlands and the volcanic plains west of the Tiber since the time when humans first occupied this part of Italy. Its economic and cultural history is linked to the road system that connected the highland shepherds to the lowland market centers west of the Apennines, including the city of Rome. During the Roman period, it also played an important role in long-distance transhumance between Apulia and Lucania in the south and the Apennines, in particular the Rieti basin⁸.

In terms of the history of villas in ancient Italy, the site is not atypical for a late Republican structure. Similar complexes can be visited at Bellona⁹ in the province of Caserta and elsewhere (the villas at Vacone and Monte Elci are regional examples of terraced villas)¹⁰. The structure consists of a villa with a concrete terracing wall, E-W x N-S, about 60 x 25 m, on which the core of the building was built. The *basis villae*, as just pointed out, includes a cryptoporticus at its eastern end.

There are other monumental structures contemporary with the 'Villa of Titus' in this part of the Velino Valley. These include the so-called Baths of Vespasian, located about 2.6 km to the southwest, in Caporio (a *frazione* of the *comune* of Cittaducale), and the so-called Nymphaeum of the Flavians in the public gardens of the nearby town of Borgo Velino, located about 3.6 km northeast of the Villa of Titus. Further east along the Via Salaria are other comparable Roman sites, such as the ancient village of Falacrinae, the birthplace of Vespasian, the subject of archaeological investigations conducted by the University of Perugia and the British School in Rome¹¹.

⁷ MCCALLUM, BECKMANN *et al.* 2020.

⁸ CAMERIERI, TRIPALDI 2009: 40-42. VARRO, 2.2.7.

⁹ DE CARO, MIELE 2001: 548-549.

¹⁰ WITCHER 2020: 159-160. On Vacone, see NOTARIAN, BLOY AND FARNEY 2016.

¹¹ COARELLI *et al.* 2012.

Method

Archaeological investigations of the site were carried out using standard techniques and methods. For the most part, excavations were carried out manually, with the assistance of a small backhoe to remove colluvium and backfill from the previous season, and to once again backfill the site at the end of the 2022 excavation season. All archaeologically sealed contexts were dry sieved using a 0.5-cm mesh to recover artifacts and eco-facts, and at least 40 liters of soil was taken from each context for flotation, with the goal of recovering archae-obotanical and small faunal remains. For those contexts with particularly high levels of archaeobotanical remains, we collected 100 percent of the soil found there. These samples were processed by flotation at the site in 2022 by Katie Miller, a PhD student at Royal Holloway University in London, supervised by Dr. Erica Rowan, who is responsible for our environmental sampling strategy.

Photography and photogrammetry were performed using a drone (DJI Mavic Pro 2), a mini-drone (DJI Mavic Mini 2) and a camera (a Nikon Z7 II mirrorless camera) mounted on a hand-held telescopic pole. Additional measurements used to create overlays (in addition to photogrammetry) were performed using a Leica TCR 1203+ total station.

The photogrammetric plans in this report were generated by Dr. Marco di Lieto (di Lieto & C. S.R.L.) in his office in Matera using AutoCAD and were edited by Matthew Munro of the University of Calgary. 3D images of the structure were generated by Charles Jackson of Saint Mary's University using Metashape.

Overall Plan

The structure we are excavating is a long, terraced villa, measuring approximately 60 meters E-W x 25 meters N-S, with a well-defined cryptoporticus occupying the southeastern corner of the structure. This year's excavations have provided additional information regarding the general plan of the terraced building (fig. 4). As can be seen from the excavation plan, our trenches covered an area of ca. 200 m2, measuring approximately 10 m N-S by 20 m E-W. There are ten identifiable rooms, including those excavated by G. Alvino's team in 2010/2011. The rooms on the terrace that we excavated in 2022 are located at the northern limit of the structure (Rooms 8a, 8b, 9 and 10, figs. 4 and 5), bordering a long wall carved into the natural rock, to which the northern walls are attached. These rooms are arranged along an extensive corridor (Room 6) running from east to west, which initially departed from the easternmost part of the structure in a westerly direction until it reached Room 10. There is clear evidence that this corridor continues westward, as visible in the western section of the excavation, so its overall extent will only be defined through future excavations. Based on the wide southern entrance to Room 10, discussed below, we also hypothesize the existence of a courtyard or peristyle to the south of Rooms 8, 9, and 10, bordered by the long hallway just described. Where the corridor defines the courtyard's northern limit, it would be a portico. Since we are still not entirely certain that the area to the south of Room 6 is a courtyard, and the fact that Room 6 begins at the eastern limit of the building where it clearly did not border a courtyard, we will refer to it is a corridor throughout this report for consistency.

Rooms 1-5

Rooms 1 to 5 (fig. 6) were excavated by Alvino in 2011 and appear to be a series of spaces giving access to the rear areas of the terrace from the east. Room 3 contains a damaged black and white mosaic which we cleaned, conserved and re-buried under a layer of protective material in 2018. Room 5 was excavated in 2019 and proved to contain a sub-floor leveling layer with pottery and coins dating to (and not later than) the mid-1st century CE.



Fig. 6. Plan showing Rooms 1 through 5, Villa of Titus, 2022. Plan courtesy of Matthew Munro, University of Calgary.

Room 6, East-West Corridor (18.2 x 1.5 m E-W x N-S, ca. 28 m2)

Room 6 (figs. 4, 5 and 7) is a long (18 m) east-west corridor, 1.5 m wide, that begins in front of Room 5 and runs west past Room 8 to Room 9, linking these three rooms, before ending at Room 10. The corridor appears to have once given access to Room 10, but the entrance had been blocked (see discussion of Room 10, below). The part of Room 6 in front of Room 5 and a portion of Room 8 was excavated to its floor level in 2019. The floor was revealed to be plain, waterproof concrete. Large rectangular stones were set into this floor in pairs where the corridor passed between the rooms, perhaps as bases for wooden door jambs (see discussion of Room 10). It may also be that for some part of its length, this corridor, in particular to the immediate east of Room 10 where it skirts the southern edge of Room 9, functioned as a portico, which opened onto a courtyard or peristyle to its south. Further excavation is necessary to confirm this.



Fig. 7. Plan of Rooms 8a, 8b, and corridor 6, Villa of Titus. Plan courtesy of Matthew Munro, University of Calgary.

In 2022, corridor Room 6 was excavated to the floor in two areas: first, in its extreme western part in front of Room 9; second, in the east in front of the entire length of Room 8. In the west, the corridor had the same concrete floor as in the east (though in much better condition) and there was no architectural division between the corridor and the space designated Room 9. A large amount of collapsed plaster and broken tile was found above this floor level; the soil above the floor contained a number of nails and some fragments of pottery.

The situation in the east portion of the corridor in front of Room 8 was entirely different. The corridor was clearly divided from Room 8 by a plastered wall made of perishable materials (see description of Room 8, below). This wall was set into a depression in the concrete floor, made at the time the floor was constructed, showing that the corridor was always intended to be physically separate from Room 8.

Corridor Room 6 was cleared along the entire length of Room 8, up to the entrance to Room 9 in the west. The soil immediately above the floor in the central part of the corridor (that is, in the middle section of the corridor opposite Room 8) contained, in addition to fragments of collapsed plaster and broken tile, a significant

concentration of artefacts. These included many pottery fragments, including a number with old joining breaks (amphora, coarse ware and cooking ware, many pieces sooted), glass vessel fragments, nails, a piece of lead and a multi-coloured glass bead. In approximately the same area, in 2018, we found the intact neck of a Dr. 2/4 amphora at a slightly higher level. The concrete floor of the corridor was somewhat less rough in the west than in the east, perhaps indicating more foot traffic in its eastern part and less in the west. This would be in agreement with the possible blocked door between Rooms 9 and 10, which would have made movement between the two spaces impossible.

Rooms 8a and 8b (Room 8a: ca. 4.1m N-S x 3.0m E-W, ca. 12 m2.; Room 8b: ca. 4.5m N-S x 3.1 m E-W, ca. 13.95 m2)

Room 8 (figs 7 and 8) lies north of corridor Room 6, between Rooms 5 (to the east) and 9 (to the west). Room 8 is a large, irregularly shaped space measuring 6 meters wide. The rear (north) wall is not at right angles to the west and east walls, forming a room that is deeper in the east than in the west (4.6 m vs. 4 m). It is possible that the north wall was constructed at this unusual angle because it follows the line of the natural bedrock behind it. Excavation of Room 8 began in 2018, when a large amount of colluvium and a number of fragments of collapsed concrete and stone masonry, including three very large pieces, were removed. Excavation in 2019 reached the floor in a 1x1m son-



Fig. 8. Photograph of Rooms 8a and 8b with Room 6 (corridor) in the foreground. View from the south. The well, earthen walls, and small hole in the floor of Room 8a are visible. Myles McCallum, Saint Mary's University.

dage in the NW corner of Room 8. This revealed several layers of plaster collapse above a plain concrete floor, with a modest number of ceramic finds. It also revealed a gap between the plaster on the westernmost N-S wall within Room 8 and the long E-W wall lining the natural rock forming the Room's northern limit, which is discussed in more detail below based on our results from 2022.

Excavation of the entire area of Room 8 in 2022 immediately revealed that it was not, as we thought earlier, open to corridor Room 6, but instead was separated from it and furthermore subdivided into two roughly equal halves (designated 8a in the west and 8b in the east) by partition walls made from a mixture of clay and perishable materials covered with plaster, either pise or cob, or some form of *opus craticium* in which earth is used in place of stone¹² (fig. 9). Furthermore, the rear (north) wall of both rooms (8a and 8b) was squared off by another plastered wall of the same material, as can be seen on the plan. This was apparently done to render the rooms perfectly rectangular, rather than follow the irregular line of the north stone wall. It may also have improved the waterproofing of these two rooms, in particular providing space into which water seepage from the bedrock and colluvium behind (to the north of) this wall may have been diverted. These partition walls are preserved to a maximum height of 0.25m (in the northern part of Room 8).

The use of pise, cob, and other rammed earth walls is relatively common in Roman architecture of the late Republic and early Imperial periods¹³. They may have offered some advantages with respect to climate/humidity control in comparison to stone or concrete masonry architecture. The Villa of Titus, situated in

¹² For more on such walls, see Adam 1994: 132-135 and Camporeale 2013: 192.

¹³ For an example of much more massive, rammed earth walls at the villa di Rufio (Giano dell'Umbria, PG), see Vidal and Medina 2021: 9-11.



Fig. 9. Detail of the fill within the cob, pise or opus craticium walls and the wall's exterior surface, Room 8a. Martin Beckmann, McMaster University.

the highland Velino valley between Monte Terminillo (2217 masl) and Monte Nurietta (1672 masl) and so subject to cold winter temperatures and snow, as well as soaking spring rains, may have benefitted from the use of cob or pise, and may also provide us with a clue to the possible functions of these rooms.

The southern partition wall separating Room 8 from the corridor and the central partition wall separating Room 8a from 8b were constructed in a similar way, and at the same time the concrete floor of both the corridor and the rooms was laid. The walls were set in depressions in the floor, rectangular in profile, approximately 0.15m wide and deep (fig. 10). These depressions were not cut into the floor, but rather were created by placing material, almost certainly wooden beams or bottom plates, in position in the early stages of floor construction; the floor was then built up beside these beams. The evidence for this is the very smooth and regular internal face of the depressions in a number of places, the presence of a number of nails in the depressions, and the discovery of a large amount of charcoal in one area, the remains of one of the beams. The walls were then built up on top of these wooden beams and plastered on their exteriors. The plaster rests on the floor itself, on the very edge of the depressions in the floor. The exterior of the plaster is smoothed, while the interior of the plaster (in one sample removed from the central dividing wall) shows impressions in a rough herringbone pattern, presumably of reeds or small branches woven as part of a cob construction. The interior of these walls may have been filled with compacted earth; the soil between the surviving standing plaster has a light orange colour, compared to the brown soil fill of Rooms 8a and 8b, and contains small gravel inclusions of a roughly uniform size.

No evidence of doorways through the partition wall separating these rooms from the corridor was found, but these could have been made of wood and not preserved. No standing wall plaster was found in the central areas of the line of the partition wall between either room and the corridor, indicating that openings in the wall could have existed there (fig. 11).



Fig. 10. Detail of slot in floor between Room 8a and corridor 6, used for wooden door sill or framing element. Martin Beckmann, McMaster University.





The walls at the rear (north) of Rooms 8a and 8b were not set in depressions in the floor, but instead were built on the upper surface of the floor itself. The structure of these walls, however, was similar to the partition walls, in that they were built on wooden beams. The impressions of these beams are visible in the floor of both rooms, indicating that the beams had been laid on the floor while the concrete was still fresh.

Few features were found within these rooms. In Room 8a, a rough hole with a diameter of approximately 30 cm had been cut in the floor in the north-east corner of the room (fig. 11). This hole was 0.25m deep with an irregular bottom; no finds were made in this hole and its purpose is not clear, but it may have served to support a vessel or storage container—perhaps a small dolium— or held a post to support a sagging roof. In the south-east corner of Room 8a five rectangular stones had been arranged in a reversed "L" shape abutting the plaster of the partition walls (fig. 11). Some discolouration was visible on the inner face of these stones and on the floor near them, suggesting burning. Combined with the evidence of the numerous fragments of cookware found in the corridor Room 6 immediately adjacent to this area, this suggests that this part of Room 8a may have been used as a hearth. The stones may have been placed as they were to insulate the partition walls from heat and to protect their plaster surface. Room 8b contained no cuttings or structures, but the remains of two amphorae were found in fragments in the south-west corner of the room (fig. 12). The use of pise or cob, with its excellent climate-control properties, in both of these rooms may also indicate that they were used for food storage and preparation. The floor of Room 8b was also extremely rough in the central and south-west parts of the room, perhaps the result of wear from frequent foot traffic. By comparison the floor of Room 8a was less worn, and primarily in the central and south-central area.

In previous years we had been puzzled by the structure of the east wall of Room 8. The northern half of this wall is constructed of stone, in the same manner as the west wall, but a large part of the southern portion of the wall is built of brick, including a long section of bricks placed vertically, forming a flat arch, with its bottom just above the level of the floor of Room 8b. This suggested the top of a doorway or passage, but excavation in 2022 revealed something else entirely. When the floor of Room 8b was cleared, it was found that a large portion adjacent to the flat arch in the east wall had subsided into a space formed by an earlier structure, apparently a well (fig. 13). This well was ca. 1.5 m wide, cut through the natural limestone, and faced with small, roughly



Fig. 12. Mid-excavation photo of the remains of a Dr. 2/4 transport amphora sitting on the concrete floor in Room 8b. View from the east. Myles McCallum, Saint Mary's University.



Fig. 13. Photo of the well and piece of subsided concrete flooring within it, Room 8b. View from west. Charles Jackson, Saint Mary's University.

shaped stones coated with a dark pink plaster. Part of the wall of the well extended under the flat brick arch in the east wall of Room 8. The subsided portion of the floor of Room 8b was found inside the well at a depth of approximately 0.40m, apparently having sunk into it after the abandonment and destruction of the building (plaster collapse, similar to that found in the room itself, was found atop the subsided floor). Below the subsided floor was rocky soil containing construction debris including white mosaic tesserae, both cubic and rectangular (of the same type used in the mosaic in Room 3 two rooms to the east), bricks, and a number of brick column segments. This suggests that the well is an earlier structure that was filled in during the construction of Room 8. The fill appears not to have been sufficiently compacted, allowing the floor to subside into the well after the building had been abandoned. The presence of the well also explains the flat brick arch in the east wall: it was built to keep the weight of the wall off the area of the filled-in well.

Inside the well, at a depth of about 0.40m, adjacent to the subsided section of floor and immediately beneath the flat arch in the east wall of Room 8, a remarkable group of objects was found. These included a nearly intact ceramic lamp, likely a Loeshcke 1B¹⁴ (the bottom had been broken out), a rectangular silvered bronze mirror (broken into five fragments), a blue lapis lazuli gemstone, a large ivory hair pin, an iron key, five iron nails and a bronze coin of Augustus¹⁵ (figs. 14, 15 and 16). Mixed in with these finds were many bones, broken into pieces and some showing cut marks, all from a juvenile pig, alongside a number of charred seeds, which have yet to be examined by our archaeobotanists, Erica Rowan and Katie Miller. This group of objects appears to have been deliberately placed, possibly as a ritual deposit,¹⁶ immediately before the well was covered during construction of Room 8. When the floor in Room 8b subsided into the well, it damaged this deposit. After the subsidence, it is clear that the deposit was further disturbed by rodents (when we floated the sediment, we recovered not only the greater part of a suckling pig, but thousands of small rodent bones, mostly from mice) and for some period of time by the elements when the deposit was initially exposed. We intend to work this deposit up for publication separately, once the archaeobotanical report is complete.

We stopped excavating the well after we reached a depth of ca. 1.2 meters. The flat arch over the well became an obstacle as we dug more deeply into the well and we also wanted to consult with an engineer to determine how dangerous it might be to continue excavating within this structure. We hope to be able to return to the well in 2023 or 2024 to see if we can reach its bottom.

¹⁴ Bussiere and WOHL 2017: 64 (for drawings of undecorated lamps) and 70-88 (for decorated examples from the Getty Museum).

¹⁵ The coin is an *as*, on which is legible Augustus and next to it the illegible name of the moneyer. Obv.: ...]AESAR AVG[..., head of Augustus left; Rev: Rev: ...]VIR A A A F[..., in centre S C. Based on the fact that the head on the obverse is left and the inscription, the coin may be dated to after 7 BCE, likely 7 – 4 BCE.

¹⁶ For more on structured votive deposits in central Italy, see DI GIUSEPPE 2015 and 2017.



Fig. 14. Some of the artifacts from the possible votive deposit within the well (Room 8b). Clockwise from top left: Loeschcke 1b lamp, glass paste bead, bone pin, lapis lazuli bead. Charles Jackson and Myles McCallum, Saint Mary's University.



Fig. 15. Silvered bronze mirror fragments from possible votive deposit within the well (Room 8b). Charles Jackson and Myles McCallum, Saint Mary's University.



Fig. 16. Lamp disk from the possible votive deposit within the well (Room 8b). Charles Jackson, Saint Mary's University.

Taking all the evidence into consideration, it appears that the walls and floor defining Room 8 were constructed at the same time, and over an area of earlier occupation, the only preserved feature of which is the well. From the start, the builders of Room 8 intended for it to be subdivided into two roughly equal sub-units, both of which presumably had access from corridor Room 6. The only evidence for the date of the construction of Room 8 is provided by the ritual deposit that was placed in the well just before this was sealed. The only datable objects from this assemblage are the ceramic lamp and the Augustan coin; these would be consistent with a date in the first century CE, but we cannot be more precise. Better evidence might come from the sub-floor leveling fill of Room 5 immediately to the east. If this fill was also deposited at about the same time as the stone and brick wall shared by both Room 5 and Room 8 (as seems probable), then the pottery and coins it contains suggest a date of construction close to the middle of the first century CE.

Room 9 (full dimensions unknown; excavated dimensions: 2.6m E-W x 3.7m N-S, ca. 9.6m2)

Room 9 was discovered during the 2018 excavation season (figs. 17 and 18). It appears to follow the same orientation as Rooms 3, 5, and 8, but only approximately one third of the room was excavated. Located in the middle of our trench, the exposed portion of the northern wall is built against the natural rock terrace. Two entrances to Room 9 were identified and include an open doorway with corridor Room 6 on its eastern wall and a blocked doorway with Room 10 on the western wall. This blocked eastern doorway is discussed in more detail in the context of Room 10 below.

The exposed portion of the northern *opus incertum* wall in Room 9 revealed an architectural peculiarity. The eastern section of this wall, approximately 0.30 m wide, was identified at the western end and joined to the N-S wall by at least one well-cut masonry quoin. East of this was another section, approximately 2.3 m wide, representing either a partial failure in the *opus incertum* retaining wall or a repair (fig. 19). Interestingly, only the top half of this wall was identified, and it appeared to sit directly on colluvium and behind a layer of wall plaster. Further excavation of this colluvium was not undertaken to help preserve the integrity of the upper wall courses. Further excavation in the eastern end of Room 9 will likely help resolve how and why this northern wall was constructed in this manner.



Fig. 17. Plan of Rooms 9 and 10, courtesy of Matthew Munro, University of Calgary.



Fig. 18. Photo of Room 9 at the end of the excavation, view from south. Myles McCallum, Saint Mary's University.



Fig. 19. Photo of N wall of Room 9 as viewed from the south. This shows the solid masonry upper part of the E-W running wall. The area below the red line on the E-W wall is made up of colluvium, which has been plastered over. Myles McCallum, Saint Mary's University.

Few artifacts were recovered from the partial excavation of Room 9 to help explain its function, however identifiable pottery reflects the same occupation dates as Rooms 8 and 10. Sitting on top of the concrete floor was approximately 4 cm of brown clay, on which a pile of tegula roof tiles was laid against the southern wall.

Large pieces of fallen wall and roof plaster, in addition to flat segments of broken concrete, were also arranged around the room to form a makeshift surface in the post-occupation period (fig. 20). No additional artifacts or features were identified with this surface to help further clarify its function or to provide a date.



Fig. 20. Plaster collapse and layer of plaster above original concrete floor of Room 9. Charles Jackson, Saint Mary's University.

Room 10 (5.46 m x 5.25 m N-S x E-W + diameter of apse 4.7 m, ca. 32 m2)

Room 10 (figs. 17 and 21) was initially discovered during the 2018 excavations. It is located at the westernmost edge of our trench and, like most of the other excavated rooms, its northern wall is built against the natural rock terrace, into which it is also partially cut. This northern wall is made of cement with quasi-reticulate and brick (*opus latericium*) facing. In addition, this wall is not in line with the northern wall of rooms 5, 8 and 9, but instead is set further back into the hillside by more than 2 metres.

The room itself differs architecturally in other ways as well. The northern wall is apsidal and within it is set a raised and arched, semicircular niche, probably a platform for statuary display (fig. 22). The brick facing within the apse and niche is also exceptionally regular and very well constructed (fig. 23), more reminiscent of the masonry technique employed on public buildings in Rome during the early imperial period than contemporary examples in nearby buildings in the Velino valley or Rieti basin, including that of the nearby Baths of Vespasian or the more distant Villa at Cottanello¹⁷ and the Villa of Quintus Axius.¹⁸ Finally, the apse was covered by a semicircular concrete vault, set above the arched ceiling of the niche.

The masonry within the room also appears to correspond to two separate building phases. The parallel side walls, running N-S and forming the room's eastern and western boundaries, appear to pre-date the apsidal northern wall and its niche. These walls do not join but simply abutt each other. It seems that the northern limit of the room was reworked at a later date when the apse was added and the room cut more deeply into the natural limestone that delimits the entire building's northern edge. We hope to find dating evidence related to these renovations in 2023, when we complete the excavation of this room and dig beneath the floor level.

¹⁷ PENSABENE, SFAMENI 2017.

¹⁸ COLARIETI-TOSTI 1904.



Fig. 21. Rooms 9 and 10 from the south. Myles McCallum, Saint Mary's University.



Fig. 22. Detail of apse and niche (north wall) of Room 10. Myles McCallum, Saint Mary's University.



Fig. 23. Detail of opus latericium brickwork in the niche within Room 10. The drone target is 10 x 10 cm. Myles McCallum, Saint Mary's University.

At present, we know of three entrances to Room 10 (fig. 24). One is from the corridor running east to west, shown on the site plan as Room 6, described above, which reaches this space through the eastern wall; the second is opposite the first on the western wall and probably includes a continuation of this corridor. The entrance to Room 10 from the corridor, Room 6, on its eastern side revealed that the doorway was blocked during renovations to Room 10 (the concrete floor runs beneath the wall plaster and masonry blockage within the doorway had a gap at both its northern and southern ends between it and the adjacent, earlier phase walls. The gaps were plastered over on both sides (within Rooms 9 and 10), but they were filled with dirt. One of these gaps was excavated to its bottom, which provided a great deal of information. The gap was filled with numerous nails and a small silvered medallion (silver plating over lead) likely used to decorate some sort of wooden framing element. At the bottom of the gap were three nails set vertically to the floor (fig. 25), just above a small stone that likely served as a door jamb (see discussion for Rooms 6 and 8 above). The finds indicate that this gap and the identical one to the north of the masonry blockage were once filled with the wooden frame of a doorway. Opposite the masonry blockage and its associated gaps is an identical arrangement on the western wall of Room 10, indicating that both doorways were blocked as part of the same renovations to this space.

The third entrance to Room 10 is to the south and runs the full width of the room, although we are not certain into what this door opens. This entranceway is flanked by two large limestone blocks, ca. 0.30m E-W x 0.42m N-S, on which may have been placed columns flanking the entranceway. The concrete floor also ends at the southern limit of Room 10 with a long cut which we did not excavate, whose edge is defined by a more or less straight line running from east to west in line with the southern wall of Corridor 6. This cut may have once





Fig. 25. Nails, possibly in situ, excavated from a gap probably left by the wooden door frame between Rooms 9 and 10. Charles Jackson, Saint Mary's University.

Fig. 24. Plan showing location of blocked eastern and western entrances to Room 10 and broad southern entrance onto possible courtyard. Matthew Munro, University of Calgary, and Myles McCallum, Saint Mary's University.

contained one or more threshold stones which, when combined with a pair of flanking columns, would have created a striking entrance to Room 10. These conjectured threshold stones may have been robbed-out when materials were salvaged after the structure's abandonment.

In 2022 we were able to remove the fill in the western and southern edges of the room and reach the floor. The fill contained fragments of concrete, plaster, and tiles. At a level ca. 1m above the floor, we found traces of a lime kiln, presumably built among the ruins after the collapse of the villa and beneath the 8th century CE occupation level discussed above and in the 2019 report¹⁹. The extant floor surface itself is concrete, very similar to that of rooms 6, 8 and 9 to the east. Based on the architectural elegance of the room, however, it is possible that the concrete represents a subfloor and that the ancient surface was removed when the building was abandoned and building materials salvaged, on which see more below. If this is the case, we might expect an *opus sectile* surface in marble or a mosaic, and in 2019 we recovered a large piece of black and white mosaic within a small test-trench in the disturbed rubble over the concrete floor surface. Of course, without *in situ* pieces of either type of flooring it is impossible to argue convincingly for their presence.

An irregular hole with a diameter of about 0.25m (fig. 26) has been dug in the concrete floor near the room's western wall, and the edge of what appears to be a larger hole towards the center of the room was also identified and defined. A sherd of local *impasto bruno* pottery (ca. sixth century BCE) recovered near the edge of the smaller hole may have come from much older occupation layers below room 10.

As with the other architectural spaces, at present we are only able to postulate the function of the room. At the same time, the presence of the apse and niche, the size of the room, as well as the brilliantly executed brick facing and potentially monumental southern entranceway, suggest that Room 10 was a display, reception or worship space placed in a central area within the terraced structure.

¹⁹ McCallum, BECKMANN et al. 2020: 13.



Fig. 26. Room 10 with a hole in the concrete floor indicated. Myles McCallum, Saint Mary's University.



Fig. 27. Aerial view of the test trench within the Crypotoporticus (Room 50). Myles McCallum, Saint Mary's University.

Cryptoporticus, Room 50 (Area: ca. 102 m2)

In 2019, removal of debris from excavations by G. Alvino revealed intact stratigraphy in the cryptoporticus, including significant wall collapse events, preserved to a height of ca. 2 meters. This presented a possible opportunity to investigate one of our early goals, that of identifying and examining parts of the villa complex once associated with productive activities and the lives of the non-elites. In 2022 we excavated a test trench in the centre of the cryptoporticus, within one of the two easternmost rooms within it, Room 50 (figs. 27, 28 and 29). The trench measured 2x5 m N-S x E-W. At a distance of ca. 2 m west of the eastern entrance to Room 50, we discovered two stones that may be the top of a staircase (fig. 30). In addition, doorways were discovered in the north and west walls of this room, opening onto Rooms 51 and 52, respectively, neither excavated. Sherds of coarse ware pottery, the handle from a Spello-type amphora, and some sherds of Italian Terra Sigillata were found in this area, along with a coin of the emperor Claudius.²⁰ The chronology of these levels is thus equivalent to that of the levels excavated at the top of the terrace, indicating an occupation from the first to the second century CE. The architectural discoveries and artifact finds show that this is an area worthy of further exploration.

Periods and phases

There are two distinct periods of occupation of the site. The first period corresponds to the construction of the villa itself and subsequent renovations in Roman times. The second period amounts to a post-abandonment reoccupation of the site after parts of the original structure had begun to collapse.

Within the first period there are two identifiable phases of construction. Investigations, at present, indicate a first phase beginning in the first century BCE, although chronological framing is based almost entirely on the presence of residual ceramic material in fills associated with the second phase of Period I and on an examination of construction and decorative techniques. Only the ex-

20

²⁰ AE quadrans, Claudius, RIC 84, 25 Jan.-3 December 41 CE. Obv: TI CLAVD[ius caes], in centre modius; Rev: [pon] M TR P [imp co]S DE[s it], in centre SC.



Fig. 28. Plan of excavations within the Cryptoporticus. Plan courtesy of Matthew Munro, University of Calgary.



Fig. 29. 3D model of the Cryptoporticus (Room 50) at the end of excavations. View from south. Charles Jackson, Saint Mary's University.



Fig. 30. Photo of possible stairway, Cryptoporticus (Room 50). Charles Jackson, Saint Mary's University.

cavation of building trenches and fills associated with the first phase of Period 1 will provide adequate dating evidence. During this period the building appears to have been relatively modest, located in the northeastern corner of what would become the large terraced villa that is visible today from SS 4, above Lake Paterno. Our research to date indicates that the "villa" at that time may have consisted of a minimum of six rooms aligned along a limestone rock bank running east to west (rooms 1, 3, 4, 5, 6 in plan, fig. 2), defined by a long stone wall built directly on the rock substrate. The function of this structure is unclear due to the incomplete nature of the present evidence. Based on the later residential function of the later terraced structure, however, it seems likely that it was a modest country villa.

Phase 2 is now clearly datable based on the discovery of sealed floor fill and construction trenches associated with major renovations of the villa. Datable material includes Italian Terra Sigillata, transport amphorae (Dr. 2/4) datable to the first half of the first century CE, and bronze coins minted during the reign of Claudius. This allows this renewal to be framed in the early imperial age (Julio-Claudian age).

The renovations of Period I, Phase 2 were substantial. They included the creation of the artificial concrete terrace structure and the extension of the building for another 40 meters to the west. This included the creation of Room 10, the raising of the original floor levels, and the insertion of at least one black-and-white mosaic.

The changes during this renovation amount to monumentalization of the earlier structure. The result is a building clearly visible from the ancient Via Salaria below. Moreover, the monumental terraced structure essentially framed activities on Lago di Paterno (*lacus Cutiliae*), which was located to the north of this sacred lake. This certainly was no accident; it probably represents an intentional reworking and renewal of the traditional religious landscape of the Velino Valley.

Further renovations may have been undertaken within Room 10, which would represent a third phase. At this time, the long corridor which may run the full length of the structure from East to West, was blocked as it passed through Room 10. Room 10 was extended slightly to the north, cutting into the natural bedrock, which now housed the apse and its associated niche. We are not currently able to date this renovation as we have not reached the construction trenches associated with the aforementioned architectural features, but hope to find dating evidence when we return in 2023.

Based on data from 2022, we can also say that the structure was not in use for a very long time. The latest datable finds from all contexts are no later than the second century CE. There is no African Red Slip present, and the latest datable pottery are fragments of Spello-type amphorae²¹. We hope to find more dating material associated with the systematic recovery and removal of building materials after its abandonment, such as the two holes in the floor of Room 10 and the trench in which may once have been set the threshold stones that formed part of the southern entrance to this same room.

We are also able to say something about the structure's demise. It appears that the roof over rooms in the northern part of the structure, on the upper terrace, was intact at the time of the structure's abandonment. This facilitated the salvaging of various building materials from these rooms, and the eventual insertion of new structures as part of the much later Period II discussed below. This does not appear to be true of the rooms within the cryptoporticus. The walls and masonry collapse identified in this part of the villa are likely associated with a catastrophic event that destroyed a significant part of the building, including the cryptoporticus and the rooms above it in the structure's SE corner.

Period II saw a reoccupation of the structure many years after its initial abandonment. As mentioned in our previous report, there is clear evidence of this new occupation in the circular holes made in the surface of the black-and-white mosaic discovered by G. Alvino, functional for the construction of a small building, perhaps a hut. In 2019 we discovered that the area within the apse and niche, described above as part of Room 10, was also transformed into a kind of simple shelter, partly built over an earlier collapse of parts of the ceiling and wall. Carbon 14 dating indicates that Period 2 may be chronologically referable to a period between the mid-7th century CE and the mid-8th century CE. This suggests that the Roman-era villa had been abandoned and was in a partial state of collapse at this time, as structures and hearths from the Lombard period were built on top of the first masonry collapse layers. These structures were subsequently buried by the collapse of the vaulted apse and associated terracing wall, and whatever might have been left of the ceiling/roof.

Unfortunately, the nature of the Period II occupation is not known. What we can say is that the Lombardperiod structures are less imposing than those that characterize the Roman-period villa and clearly reuse elements of the villa itself in their construction. It seems likely that during Period II the site was used for the processing of agricultural products, as storage for agricultural equipment, or as shelter for shepherds and their flocks. Clearly it was no longer a representative site or belonged to an elite member of society. The discovery in 2022 of a crude lime kiln in the rubble layer beneath these 7th/8th century hearths perhaps indicates an earlier period of exploitation of the ruins.

Conservation

From May to September 2022, conservation of the archaeological materials and architectural remains of the site was carried out by dott.ssa Stefania Zucconi. Regarding the architectural elements of the site, Stefania has focused on various parts of the long terraced wall that forms the northern limit of the structure, particularly in rooms 8 and 9 and the section containing the apsidal wall in which the aforementioned niche is inserted. Stefania is cleaning and preserving the metal artifacts. After the excavation was completed in June 2022, the excavated area was covered with geotextile (*tessuto non tessuto*) and backfilled.

Conclusions

With reference to the goals of our research listed at the beginning, we achieved a number of milestones in 2022. On the terrace we were able to reveal important new information about the architectural layout of the villa, particularly in Room 10, with the discovery of the Roman floor, and in Room 8, where earthen architecture was discovered. We improved our understanding of the date of construction of the main area of the villa with the discovery of a ritual deposit in a covered well in Room 8. Much information about the function of Rooms 8a

²¹ For the chronology of this particular type of Amphora in central Italy and the Tiber Valley, see Patterson and Lapadula 1997: 128.

and 8b were derived from the finds within them, indicating that they were used as a storage area and perhaps a kitchen. We were able to preserve the newly excavated architecture and greatly expanded our threedimensional documentation with drone images. Finally, we were able to prove the accuracy of the geophysical survey carried out at the Baths of Vespasian.

Acknowledgements

The project directors would like to thank the Soprintendenza Archeologia, Belle Arti e Paesaggio of Frosinone, Latina and Rieti, in particular Dott. Alessandro Betori, the Ministry of Cultural Heritage and Activities and Tourism for allowing us to excavate in the Villa of Titus, the mayor of Castel Sant'Angelo (Mr. Luigi Taddei), the mayor of Cittaducale (Dott. Leonardo Ranalli), the municipality of Castel Sant'Angelo in general for the hospitality, accommodations and logistical support provided to our team, and Susan Micocci, without whose passion and interest in the site there would have been no project. We must also thank the many students from McMaster and Saint Mary's universities, who worked long and diligently, regardless of the weather conditions. We would also like to thank the Togo Salmon Roman Studies Fund of McMaster University for its kind financial support for our McMaster students as well as the Loeb Classical Library Foundation whose generous fellow-ship will allow us to study Lago di Paterno (lacus Cutiliae) and associated environmental data.

Finally, we also thank the Social Sciences and Humanities Research Council of Canada for funding this project through a SSHRC Insight Grant (2019 to 2024).

Martin Beckmann McMaster University

Myles McCallum Saint Mary's University

Matthew Munro University of Calgary

Rebecca Payne Saint Mary's University

Simone Nardelli Independent Scholar/MiBAC

BIBLIOGRAPHY

ADAM J.P., 1994, Roman Building: Materials and Techniques, Bloomington.

ALVINO G., 2014, "Documentazione sull'ultima campagna di scavo", in *Le Terme di Tito - Archeologie d'acqua in Sabina*, Spoleto: 55-59.

BUSSIERE J., WOHL B., 2017, Ancient Lamps in the J. Paul Getty Museum, Los Angeles.

- CAMERIERI P., TRIPALDI L., 2009, "La viabilità", in F. COARELLI (ed.), *Falacrinae: Le Origini Di Vespasiano*: Roma: 39-44.
- CAMPOREALE S., 2013, "Opus africanum e tecniche a telaio litico in Etruria e Campania (VII a.C.-Vi d.C.), in Archeologia dell'Architettura XVIII: 192-209.
- COARELLI F. et al., 2012, "Excavations at Falacrinae (Cittaducale), 2011", in Papers of the British School at Rome 80: 363-365.

COLARIETI-TOSTI G., 1904, La Villa D'assio Nella Campagna Rosea, Rieti.

DE CARO S., MIELE F., 2001, "L'occupazione romana della Campania settentrionale nella dinamica insediativa di lungo periodo", in E. Lo CASCIO, A. STORCHI MARINO (eds.), *Modalità insediative e strutture agrarie nell'Italia meridionale in età romana*, Bari: 501-581.

- DI GIUSEPPE H., 2014, "Pasti per una divinita presso il trivio deel Porta Mugonia a Roma", in *Oebalus, Studi sulla Campania nell'Antichita* 9: 243-284.
- DI GIUSEPPE H., 2017, "Spiedini di carne e focacce per una divinita presso il trivio di Porta Mugonia (?) a Roma", in *Science dell'Antichita* 23.3: 553-571.
- PATTERSON H., LAPADULA E., 1997, "Le anfore di Spello nelle Regiones VI e VII", in *Papers of the British School at Rome* 65: 127-156. http://www.jstor.org/stable/40310948.
- PENSABENE P., SFAMENI C., 2017, La villa romana di Cottanello: ricerche 2010-2016, Bari.
- MCCALLUM M., BECKMANN M., NARDELLI S., MUNRO M., 2019, "The excavations at the so-called Villa of Titus (Castel Sant'Angelo, Rieti)", in *Fasti Online Documents and Research (FOLD&R)*, https://fastionline.org/docs/FOLDER-it-2019-435.pdf.
- MCCALLUM M., BECKMANN M., MUNRO M., NARDELLI S., BAKER G., 2020, "Excavations at the so-called Villa di Tito, Castel Sant. Angelo (RI), May to June, 2019", in *Fasti Online Documents and Research (FOLD&R)* https://fastionline.org/docs/FOLDER-it-2020-486.pdf.
- NOTARIAN M., BLOY D., FARNEY G., 2016, "Forgery and the Antiquarian Tradition: The Identification of Horace's Sabine Villa at Vacone," *Memoirs of the American Academy in Rome* 61: 40-58.
- PERSICHETTI N., 1893, Viaggio archaeologico sulla Via Salaria nel circondario di Cittaducale con appendice sulla antichita dei dintorni e tavola topografica, Rome.
- PIRO S., ZAMUNER D., 2014, "Le prospezioni *georadar*. Prospettive di studio e ricerca", in *Le Terme di Tito*, Comune di Castel Sant'Angelo: 63-69.
- VIDAL J.M., MEDINA M., 2021, "La villa de Rufio (Giano dell'Umbria, PG-Italia): fases constructivas y desarrollo de un modelo productivo escalvista", in *Archivio Español de Arqueologia* 94.8: 2-22. https://doi.org/10.3989/aespa.094.021.08
- WITCHER R., 2020, "The Early and Mid-Imperial Landscapes of the Middle Tiber Valley (c. 50 BC-AD 250", in H. PATTERSON, R. WITCHER, H. DI GIUSEPPE, *The Changing Landscapes of Rome's Northern Hinterland*: 117-206. ArchaeoPress Publishing, Oxford.