

## THE ROMAN VILLA OF SANTA SUSANA, REDONDO, PORTUGAL: 2013-2014 SEASONS

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In 2013 archaeological excavation and survey were initiated near the *Igreja da Santa Susana* in order to examine an early Roman colonial settlement within the Concelho do Redondo, Alentejo, Portugal.<sup>1</sup> Previous excavation at Caladinho, a small, fortified tower and domestic space, revealed evidence of the first permanent Roman occupation of this region. The ceramics from Caladinho and other towers in the central Alentejo suggest that the majority of these sites were occupied for only a few decades during the Augustan period. At Santa Susana, however, ample surface remains indicate a long-term occupation beginning in the mid-first century C.E., and suggest that this site represents an excellent opportunity to examine the transition from a landscape negotiated between marginalized pastoralists and colonial settlers to one reorganized to accommodate a Roman model of rural settlement, elite display, and intensive agricultural production. By the end of the 2014 season the remains of a first century C.E. structure and a later, richly decorated bath complex were uncovered, and the presence of a Roman *villa* was confirmed.

Large agricultural estates such as this one are the physical manifestations of a process of culture-making that, in the wider context of Roman colonialism, embodied a new administrative and economic order in the landscape. This new order relied on architectural practices (among others) to re-shape, re-inscribe, and re-interpret identities, traditions, and cultural landscapes.<sup>2</sup> Thus the material remains of sites like Santa Susana represent the pervasive contestation and rapid transformation of many aspects of social life, political organization, and cultural practices during the first century C.E. within the county of Redondo and other parts of the central Alentejo.

The site of Santa Susana is situated on a flat expanse on the eastern bank of the Ribeira de Freixo.<sup>3</sup> Flat, rolling, fertile plains lie to the south and west of the villa. The territory to the north is more rugged, while to the east the landscape is more amenable to grazing rather than cultivation. The landscape around the villa is primarily one of undulating fields of cereal crops, a few olive groves,

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<sup>1</sup> The present fieldwork at Santa Susana is made possible thanks to the support we have received from a number of local institutions and individuals. We would especially like to express our gratitude to Father António Sanches, the Junta de Freguesia de Santa Suzana, and the Concelho de Redondo for the hospitality they have offered this project and its many foreign participants. Their support remains instrumental to this research. Our field school students, too numerous to mention here individually, also made this project possible.

<sup>2</sup> Pauketat and Alt 2005; Dobres and Robb 2000.

<sup>3</sup> Coordinates: 38 ° 34'15 .97" N / 7 ° 39'52 .52" W (WGS84)

and pockets of dense, green vegetation around sources of abundant water. Indeed, the immediate area around the villa is particularly well-watered thanks to the nearby stream and seasonal washes (Fig. 1).

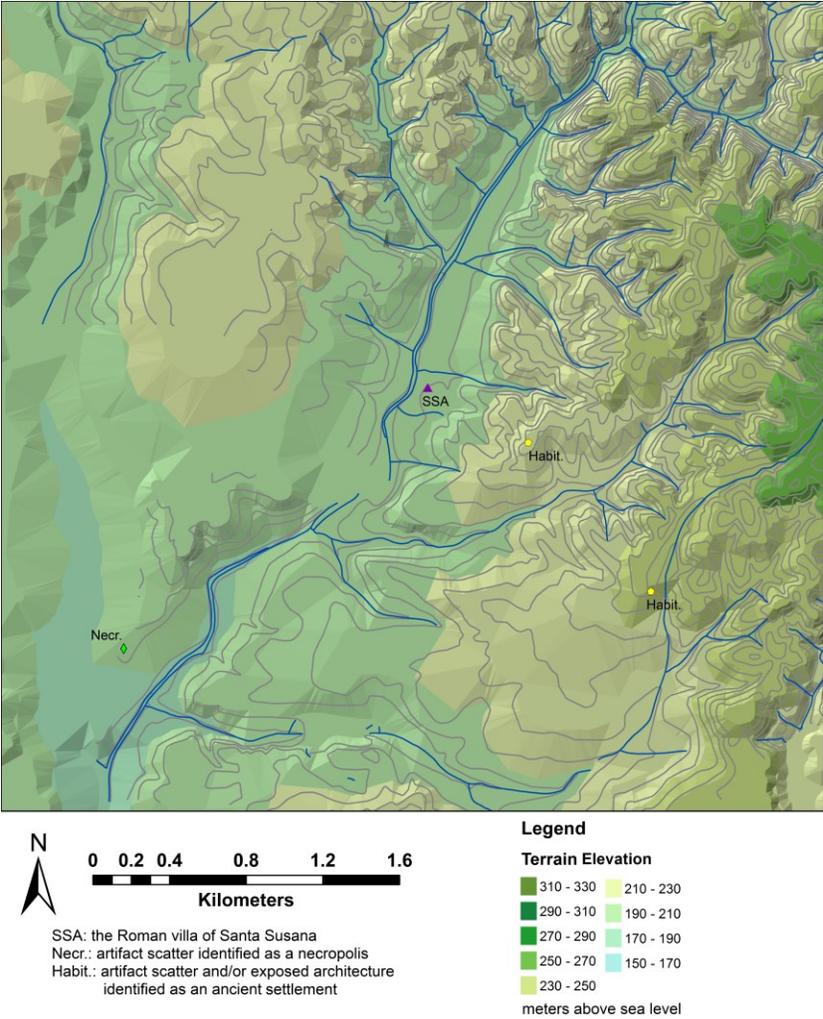


Fig. 1: Topographic map of the landscape around Santa Susana.

Several extant structures lie atop the site. The first is the 16<sup>th</sup> century chapel, the Igreja da Santa Susana, from which the archaeological site and the nearby town takes their name.<sup>4</sup> A late 19<sup>th</sup> or early 20<sup>th</sup> century house is situated north of the chapel and incorporates in its structure numerous scavenged materials from the Roman villa – including ancient bricks and tiles, fragments of *opus signinum*, granite blocks, and potsherds. A walled Catholic cemetery remains in use to the north of the house. Archaeological materials, including artifact scatters and exposed architectural features, are dispersed, with varying densities, in the 5ha surrounding the villa. Additional artifact scatters and exposed features have been located in the immediate territory surrounding the villa, including at least two smaller settlements and a necropolis.

The site of Santa Susana was first recorded in 1939 by Manuel Heleno, then Director of the *Museu Nacional de Arqueologia* in Lisbon. Heleno reported the presence of a Roman villa with exposed mosaic floors and other pavements. By the 1980s, however, many of these mosaics had been damaged by both looting and agricultural activities. An early Christian gravemarker, a few fragments of larger mosaics, and other materials were collected by a local association concerned with Redondo's heritage and placed within the Museum of Évora, but the majority remained buried at the site. Extensive field survey of the territory of Redondo, undertaken in the late 1990s as part of the creation of the *Carta Arqueologica de Redondo*, provided the first systematic archaeological recording of villa of Santa Susana as well as other sites in the surrounding territory. This prospection recorded the presence of a large granite weight used in the pressing of grapes or olives, now repurposed as the base of a sundial near the Igreja da Santa Susana, as well as several marble slabs and ashlar blocks. The authors of the *Carta Arqueologica* noted a concentration of seven other villas roughly 7km to the northeast of Santa Susana. Additionally, a number of small pre-Roman and Roman settlements, including fortified towers like Caladinho and several small farmhouses, were identified in the region. Thus far only a handful of these sites have been excavated.

Materials on the surface – including numerous pieces of South Gaulic and Hispanic *terra sigillata*, African Red Slip fragments, and sherds of *amphorae* – suggest a long-term occupation of the villa beginning in the first century C.E. and continuing into at least the sixth century. Some surface

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<sup>4</sup> The *Igreja* still sees use by the local community, and parishioners have been frequent visitors to our excavation. Their local knowledge of the church and the history of the site in recent decades has been particularly helpful.

finds, including medieval and early modern coins (C[300].105 and C[300].305), indicate a robust reoccupation of the site beginning in the 15<sup>th</sup> century and culminating with the construction of the extant Igreja da Santa Susana.

Of particular interest among the surface finds is a broken Roman *later* bearing a *graffito* and the heel-print of a hobnailed *caliga* (Fig. 2). The *graffito* appears to have been drawn with a small finger, perhaps a child's, when the brick was still wet. Two suns or flowers are drawn on the left side of the brick, with the heel of the *caliga* interrupting the topmost example. A handful of letters are scattered throughout the rest of its surface on different axes and without any discernable pattern. This appears to have been, perhaps, a child drawing and practicing their letters before the brick was fired. The footprint, which has a quite small heel, was added to the *later* shortly after the drawing was abandoned.

While parts of the site have suffered significant damage, other sections, especially those of the villa's earliest phase, are well-preserved. Thus the nature of the remains permits us to examine the rapid transformation of cultural practices following Roman rural settlement in the first century C.E. and allows us to gain a broader diachronic perspective on cultural contact, continuity, and change in the region.

The first areas excavated in 2013 were chosen based on both the presence of exposed features and Heleno's few field notes about his discovery of a polychrome mosaic (Fig. 3). This allowed us to begin to understand the chronology of the occupation and the phasing of the structures and to record previously neglected architectural and decorative

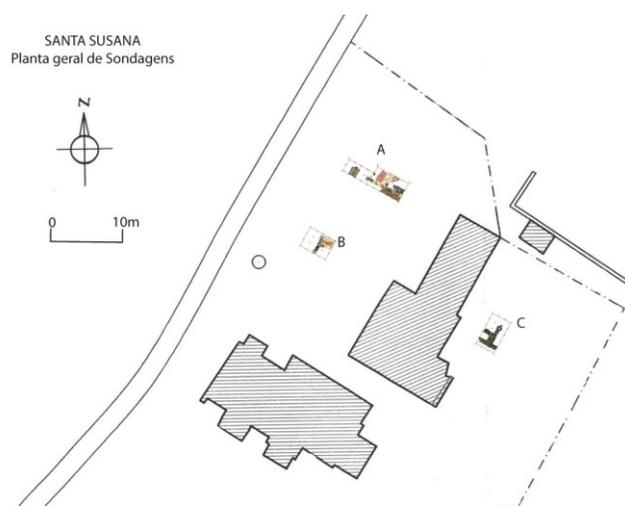


Fig. 2: Plan of the excavations following the 2013 season.

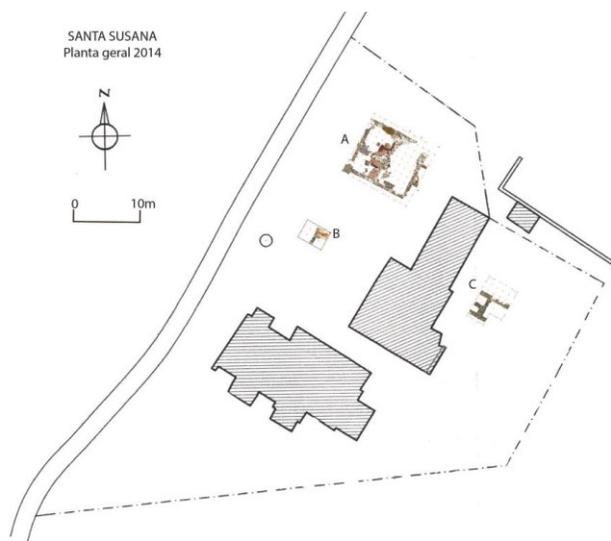
features. Three test pits, examined in detail below, were opened and given the names Sector A,

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Sector B, and Sector C. Sectors A and B were located on the northwest side of the extant 20<sup>th</sup> century house, while Sector C was opened on the southeast side. By the end of the first season it was determined that the extant remains in Sector B were especially poorly preserved, and work in that area was halted.

In 2014 excavation continued, and sectors A and C were expanded significantly (Fig. 6). Revealed features suggested that Sector A was part of a bath complex, and, although they were very fragmentary, mosaic floors attested to the rich decoration of many rooms in the bath. The extant remains in Sector C were not nearly as opulent as those uncovered on the northwestern side of the house, but they proved to be far better preserved thanks to their relative depth and the lack of regular plowing in this area. A fourth sector, named Sector D, was also opened in 2014 when an extant ancient wall was recognized in the middle of the unpaved road which runs northeast to southwest across the site. Excavation of this sector was limited to the cleaning and recording of the surface of the wall since it was impossible to leave this feature exposed. The results from each sector are presented below, but, owing to the preliminary nature of this report, a full accounting of the recovered artifacts is not included.



*Fig. 3: Plan of the site following the 2014 season.*

Intensive survey of the immediate territory surrounding Santa Susana was also undertaken in 2013 and 2014. This survey was largely experimental. Since we had good evidence for other sites in the region thanks to previous extensive surveys and diachronic data from the present excavation, we judged this to be an excellent opportunity to test new, intensive methods of survey in a targeted, controlled way. The results of this survey are presented below.

The first two seasons of fieldwork at Santa Susana thus represent the initial stages of a larger project on cultural contact in the early Roman Alentejo. First, we hope to illuminate the colonial processes which resulted from the transformation of this territory between the mid-first century B.C.E. and late first century C.E. During this time the region transitioned from a space marked by fortified watchtowers to a settled, agrarian landscape divided between a number of large estates and small, marginal farmhouses. Such a rapid, pervasive, and profound change is embodied in the material remains of sites like Santa Susana. Our project aims to assess the archaeological signatures of culture-making and contestation incipient in the positioning of such a large Roman rural estate within this colonial landscape.

#### **EXCAVATION RESULTS FROM THE 2013 AND 2014 SEASONS**

Sectors A and B were oriented according to exposed ancient walls on the north side of the extant house, while Sector C was situated on the more elevated south side after numerous *tesserae* and ceramics were identified on the surface. A Sokkia Set 6F total station was used to measure in the test pits according to the relative alignment of the extant cemetery walls.<sup>5</sup>

Each test pit was photographed, drawn, and described before excavation began. The excavation itself was undertaken according to the Open Area method originally described by Edward Harris. Stratigraphic units were assigned consecutive numbers beginning with the surface units for each sector: A[000], B[200], C[300]. Measurements were taken by theodolite from a known absolute coordinate point situated on a granite ashlar block attached to the north side of the Igreja with a height of 198.93m above sea level.

Stratigraphic units beneath the plow zone were sifted with a 2mm screen for artifact recovery. Ancient construction materials were counted, weighed, and deposited at a peripheral area of the excavation save for a few especially well-preserved examples which were collected. Artifacts were collected, sorted, and washed off-site. They were then labeled and accessioned with the addition of a second identifying number after the stratigraphic unit number, i.e., “SSA.A[000].1” for the first accessioned artifact from Santa Susana’s Sector A surface layer. All artifacts were recorded

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<sup>5</sup> These were subsequently connected to the national geodetic network: 1/2100N-1100E point: 40851.293 m-p--121,645.2690; 2/2113N-1100E point: 40853.13 m-p--121,694.1742.

in a paper catalogue for archival purposes and then entered into a database purpose-built for the excavation.

### ***Sector A: The Bath Complex***

The initial investigation of Sector A involved a test pit measuring 15m<sup>2</sup> along an exposed, mortared wall on the east side of the test pit nearest to the modern house. In 2014 this test pit was expanded to 110m<sup>2</sup> to account for the discovery of a well-preserved mosaic pavement and other extant walls very near to the surface. The surface strata, A[000] and A[001], possessed ample amounts of organic materials, Roman brick and tile, and a great deal of modern refuse. A late Roman bronze clasp, A[000].109, was recovered during the removal of this surface layer (Fig. 5), and likely coincides with one of the later occupational phases of this structure. These strata were quite thin over the majority of the sector, and it proved easy to expose the extant features which lay beneath this surface.



Fig. 4: Late Roman bronze clasp (SSA.A[000].109).

Once the surface units were removed, six distinct compartments were identified, each divided from the others by mortared stones walls and cornerstones made of large, cut granite blocks. These compartments were named Salas I through VI (Fig. 6). Excavation of these compartments revealed a diverse set of rooms from what appears to have been originally built as a bath complex attached to the Roman villa. Three of the rooms have been tentatively identified as an *apodyterium* (Sala I) and as parts of the thermal bathing rooms (Salas II and III) on the basis of exposed features and comparanda from other baths in the region. Relatively few artifacts have been recovered from this sector likely because the bath did not serve a domestic function, at least during its primary phase of occupation, and so saw little deposition of pottery or other artifacts. The stratigraphy of these rooms, however, has proved to have been greatly contaminated in recent decades by agricultural activity and domestic refuse. Nevertheless, four phases of occupation can be identified thanks to the presence of preserved floors and added walls.

**Commented [JW3]:** Insert plan of Sector A with compartments named.

Excavation in 2013 and 2014 revealed a poorly preserved polychrome mosaic floor on the southern end and along some parts of the walls in Sala I. This extant mosaic overlay another mosaic made of smaller, white and black *tesserae* which are still visible. These two floors represent the first and second phases of occupation in this sector, and have been tentatively dated to the second century C.E. and third to fourth centuries C.E. respectively. A great deal of *tesserae* from both the earlier and later mosaics were recovered during the expansion of Sector A in 2014. The mosaic floor appears to have been consolidated with a layer of thin plaster during a later phase of the structure's occupation. Subsequent floors of packed earth were also identified and associated with the extant dry stone and packed earth wall, A[008], that abuts the *opus incertum* wall, A[003], at the south end of the sector. These features appear to represent the final phase of occupation.

An apse caps the north end of Sala I, although the northeastern part of the apse has been destroyed by a large, modern pit. Materials recovered from excavation suggest that, in addition to the mosaics, the compartment was richly decorated with decorative stucco and perhaps wall-painting. One relatively well-preserved fragment of stucco, A[050].30, was shaped to resemble an engaged, fluted pillar (Fig. 6). Only a few very fragmentary pieces of painted plaster have been recovered from Sala I, and the extant, engaged wall plaster in the northeastern corner near the apse does not appear to retain any of its fresco painting.

The extant mosaic, A[020], bears a repeating floral pattern that likely filled the entirety of Sala I except, perhaps, for the apse. The large floral designs are made up of four trefoil flowers opening around a central circle and separated by long, thin leaves. It is likely that these



Fig. 5: Decorated stucco (SSA.A[050].3).

are meant to represent lotus flowers. They are each made from red, blue, and yellow *tesserae* set against a field of white (Fig. 9). Each floral design is set within an octagonal frame made from the same colors of stone and bounded by a “cordate” border resembling braided rope. Fragmentary sections of this border remain *in situ* along the edges of Sala I, especially on the east and west sides. The octagonal frames are situated so that a small square frame is created between each four larger frames. The square frames each hold their own small, polychrome flower in the middle.

This lotus design appears to be quite similar in its pattern to that found in the north corridor of the villa of Pisões (Beja), although the mosaic from Santa Susana possesses a more diverse palette. The presence of an identical pattern in the mosaics of at least two villas in this region suggests that a single workshop produced these mosaics or else the mosaic artisans in the region shared a set of regular designs. The processes involved in the creation of mosaics generally and this shared pattern specifically represent a genealogy of practice that supported a new (at least in this region) form of elite display associated with large agricultural estates. The choice of the lotus as the principal motif utilized in the mosaic was also likely intentional since that flower, native to the Nile River rather than Iberia, would not only have been appropriate in the waters of a bath complex but also would have signaled that the owners were taking part in a highly connected, pan-Mediterranean society.

An octagonal room (Sala II) lies to the west of Sala I and north of Sala III. While not fully excavated by the end of the 2014 season, it appears to have possessed a floor of *opus signinum* (A[085] and A[090]) possibly set atop large, flat *lateres* and supported by brick arches. The surviving *lateres* (A[084]) about a granite block (A[088]) in the center of the room. The western half of this room has largely destroyed, but its poor state of preservation does serve to illustrate the different stages of construction. The four walls are built from mortared stone, but the room is made octagonal with the addition in each corner of a stone fill, made up entirely of fist-sized pieces of quartz, which was then covered with a layer of mortar, brick, and stone.

Other public and private bath complexes in this region also possess similar, octagonal rooms used in thermal pools and saunas. These include the octagonal *caldarium* from the Casa de Cantaber in Conímbriga as well as rooms in the rural villas of Correio Mor near Elvas and of Hinojal near Mérida.<sup>6</sup> Each of these three examples has an octagonal room built with a raised hypocaust floor.

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<sup>6</sup> See Reis 1999: 69 (Casa de Cantaber), 137 (Villa of Correio Mor), and 147 (Villa of Hinojal).

In the *caldarium* from Conímbriga, only the subfloor grid of brick arches survives, but it is likely that the space was originally furnished with a floor of water-proof *opus signinum* much like Sala II at Santa Susana. The bathing complex at the São Cucufate villa also possesses a similar octagonal structure, but was never completed.

Sala III is located to the west of Sala I and south of Sala II. It contains a well-preserved floor of *opus signinum* (A[023, 029, 086]) set atop a granite block and a brick subfloor. Three cut, half-beveled pieces of marble (A[061].11-13) were also recovered from this room and suggest the presence of a marble-lined water feature. The *opus signinum* floor appears to have once held either the sides of a small pool or perhaps a water pipe where A[023] and A[086] join A[029]. Given its proximity to Sala II, we have speculated that Sala III may have served as another part of the thermal bathing area, but additional excavation in this compartment is necessary to clarify its original purpose.

As with most of Sector A, relatively few artifacts were recorded in Sala III save for a significant amount of ancient construction material. In addition to the small amount of pottery collected, a bronze scalpel or cosmetic applicator (A[051].1) was also recovered (Fig. 7). The scalpel is in



Fig. 6: Bronze scalpel (SSA.A[051].1)

remarkably good condition. Its handle is square, and it narrows significantly before flattening and widening into the leaf-shaped blade. The blade terminates at an angled cutting-edge. The presence of such a tool here is not altogether unusual since Roman doctors often plied their trade in and around baths. Nevertheless, this artifact and the bath complex it was found within each suggest an emphasis on hygiene and medicine that is characteristically Roman. The adoption of Roman hygienic and medical practices represents a profound shift in the treatment and ideology of individuals' bodies in the centuries following the colonization of the region.

The remaining rooms of Sector A have only been partially excavated by the end of the 2014 season. Sala IV, situated to the northeast of Sala I, appears to have been largely destroyed by the digging of a modern trash pit. A subfloor made of fist-sized quartz stones (A[074]) remains extant, as does a small part of the mortar (A[058]) which originally covered and consolidated it. This method of construction is very similar to that found in the added corners of the octagonal room, Sala II, on the west side of the structure.

Sala IV is separated from another room to the south, Sala V, by a brick wall. This room, located to the east of Sala I, appears to have been relatively well-preserved in comparison to other parts of the structure owing to its position beneath a thick layer of modern gravel associated with the extant house. A second polychrome mosaic (A[067]) was uncovered here beneath a layer of ancient construction material (A[053]) and a layer of packed earth (A[057]). This mosaic features geometric and floral motifs that differ significantly from the chordate and lotus motif of the mosaic in Sala I, yet it too appears to have suffered some disruption in antiquity followed by an attempt at consolidation with a thin layer of mortar.

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Sala VI, on the south edge of Sector A, was identified in 2013 but remains only partially excavated. This room is separated from the rest of the structure by a dense *opus incertum* wall of stone, brick, and mortar. A paving in *opus signinum* was uncovered immediately beneath the surface unit, but no artifacts were found in stratified contexts on or above the paving thanks to the modern plowing.

### ***Sector C: The First Century C.E. Structure***

In 2013 a third sector was opened on the eastern side of the extant 20<sup>th</sup> century house after ancient building materials, fineware pottery, and *tesserae* were noted on the surface. The surface unit was quite thick, but once removed some extant, well-preserved walls were discovered. Unlike the structure in Sector A, these walls are constructed of schist and blocks of cut granite without mortar. The sector was expanded in 2014 in order to encompass what we hoped would be complete rooms. Despite this expansion, the area of Sector C remained limited to 31m<sup>2</sup>, and excavation focused on the documentation of the structure and its stratigraphic and chronological sequence. Each of these rooms was excavated to occupational layers, and one was fully excavated down to bedrock.

Although Sector C appears to have suffered less from plowing than Sector A thanks to its far thicker surface stratum, a large, elongated trench (C[338]), probably the result of builders taking stone from the site, cuts into one of the structure's walls (C[320]). The foundation course of the wall was preserved despite this modern disturbance. The remainder of the structure appears to have been otherwise undisturbed after its abandonment, and the large numbers of Roman *tegulae* and *imbrices* (C[327]) found immediately beneath the surface stratum indicate the collapse of the structure's roof in at least one of its rooms.

The structure in Sector C is divided into two very narrow spaces to the south and west and one larger space on the northern side. The first, Ambiente I, lies at the southern end of the sector. This space was excavated down to the sterile geological substrate during the 2014 season, and three different occupational phases were identified in roughly 1m of secure stratigraphy. The deepest occupational strata above the geological substrate, C[330, 333, 334], underlay the extant structure and possessed ceramics dating to the seventh through sixth centuries B.C.E. Above these Iron Age layers, sherds of South Gaulic and Hispanic *terra sigillata* were found in strata associated with the extant walls, C[322, 324], and so date the first phase of occupation to the first and second centuries C.E. The structure appears to have been renovated following the second century C.E., and another floor made of compacted earth and small patches of lime (C[319]) was added. The final occupational phase was likely associated with the reuse of the Sector C structure during or soon after the occupation of the bath complex in Sector A during the third and fourth centuries C.E. This dating is supported by the presence of a coin, C[327].12, found in Ambiente III and discussed below.

The second narrow space, Ambiente II, was partially excavated in 2014. A floor (C[321]) was found after the removal of the surface stratum, as was a possible fireplace made of horizontally-laid Roman bricks (C[323]). Beneath these strata, excavation revealed the presence of a large, degraded granite slab (C[325]) beneath the entire presently excavated portion of Ambiente II. Excavation was halted here during the 2014 season, and we plan to more fully explore this space in order to determine the nature of the granite slab and its placement at the end of this narrow space.

Ambiente III is the wide area to the north of the narrow Ambientes I and II. It was covered entirely by a dense layer of *tegulae* and *imbrices* (C[327]) mentioned above. While the whole of Sector C

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contained 418kg of roof tiles, this unit contained the majority of this construction material. In total, C[327] contained 31.4kg/m<sup>2</sup> compared to the 18.5kg/m<sup>2</sup> recorded in the sector as a whole. Thus we interpreted this unit as the remains of the structure's collapsed roof, and beneath it we hoped to find *in situ* remains.

During the last days of the 2014 season we discovered the very fragile, fragmentary remains of a mosaic made of unfired ceramic *tesserae* (C[336]) immediately beneath the collapsed roof. This flooring, while not of the same quality as the polychrome mosaics in the bath complex, suggests that the structure in Sector C was not part of the villa's productive spaces but instead may have been a domestic space during the structure's earliest occupational phase. Additionally, the decision to floor this space with a mosaic made of ceramic indicates a desire on the part of its occupants to adopt Roman genealogies of architectural and decorative practice even without access to the materials required by those practices.

Materials recovered during the excavation of Sector C similarly support the identification of the structure as a domestic space as well as the adoption of Roman cultural practices within this colonial landscape. Cooking and table wares were common finds in this sector. These include classically Roman imported finewares: *terra sigillata* and thin-walled ware. While the *sigillatae* are all represented by only a handful of small sherds, a few have been typologized as individual examples of Dr. 24/25 and Dr. 27 (both South Gaulic) and two fragmentary overhanging rims characteristic of Dr. 36 (one South Gaulic, the other Hispanic). The sherds of thin-walled ware from Sector C are all too fragmentary to typologize, but the fabric is characteristic of the pottery of this type produced around Mérida, Spain.

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Two Roman coins were also found during the excavation of Sector C, but only one, C[327].12, was recovered from a secure context. Found during the removal of the collapsed roof, this coin thus provides a date for the final occupational phase of the structure.

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Although these results are only preliminary, the architectural remains and artifact assemblage from Sector C point to a sudden, profound shift in the cultural practices at this site and region. New architectural and decorative styles were adopted in the first century C.E. phase, mimicking in local materials the elite residences of Roman Italy. The tiled roof and the mosaic floor provide good examples of these changes and adoptions in the design and construction of domestic space. The material culture too suggests a profound change in the inhabitants' relationships to both

commodities, cuisine, and exchange. Imported food and drink filled *amphorae*, were stored in *dolia*, served on *terra sigillata*, and bought with coins bearing the images of emperors and the Latin of Rome. Such a profound alteration of practice stemmed from the processes of culture-making incipient in Luso-Roman colonial contact.

### ***Sectors B & D: Limited Investigations***

The Sector B test pit was situated 9m south of Sector A and near to the extant, exposed granite weight stone. Traces of construction material and a detached and damaged marble column were visible on the surface. A 4m by 3m square was opened, and it quickly became apparent that this area had been affected by deep plowing in recent times (B[205]) and a recent post hole (B[207] and B[208]) also disrupts the stratigraphy. A diverse set of building materials were recorded in all strata, including fragments of wall plaster, *opus signinum*, brick and tile, and fragments of polychrome mosaic. Higher strata contained a larger percentage of modern ceramic and glass. Some faunal remains were also collected from the higher strata of this unit, but all were judged to be from relatively recent deposition.

The sector was divided roughly in half by the remains of a wall, B[201]. It was approximately 0.5m thick and built of angular, unworked, metamorphic stones bonded with loamy soil. Two worked granite ashlar blocks, B[214] and B[215], are positioned vertically and hold the unworked stones between them. It appears that the unworked stones have been positioned to fill in an original doorway and are thus part of a later phase of occupation than the worked granite blocks. A second wall, B[217], was built from small and medium-sized stones bonded with lime mortar. It runs perpendicular to the first. Several parts of both walls were deeply cut by the plow, and pieces of the geological substrate were to be found in almost all layers of the sector. Only the middle of the eastern side of the sector possessed complex, relatively undisturbed stratigraphic units, such as B[209]. This area was filled with ancient brick, tile, and fragmentary pieces of mortar. Nevertheless, only a scant few artifacts were recovered even from these few remnant strata.

While the damage caused by deep plowing casts doubt on the contextual information provided by the artifacts from Sector B, a few are nevertheless of interest if only for establishing the overall chronology of occupation and the nature of the structures on the north side of the site. Loose

*tesserae*, fragments of polychrome mosaic, and a single gilded *tessera* were collected from the south and east parts of the sector. Several fragments, although badly damaged by the recent plowing, remained *in situ*, suggesting that the floors of this room were once richly decorated. A single *suspensura* brick was also found in one of the uppermost strata of this sector. Although this artifact was found within the plow zone, it suggests that a hypocaust or other structure with an elevated floor may have been built nearby.

A single coin and a fragment of African Red Slip (ARS) ware round out the dateable assemblage from Sector B. The pottery includes a single small sherd of ARS D, B[201].41, probably produced during the fourth or fifth centuries C.E., although the size of the sherd precludes typological identification and it may thus have been produced as late as the seventh century C.E. The coin, B[202].1, also probably dates to the fourth century C.E.

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Sector D was excavated in the final weeks of the 2014 season. During this week an exposed, ancient wall of stone and mortar was identified in the stretch of unpaved road that lies to the west of the Igreja and the modern house. The exposed surface of the wall was quickly cleaned and recorded, but exploration of the area immediately surrounding it was limited by the presence of the still-active road. Once recorded, the wall was covered over since it was impossible to leave it exposed overnight. The presence of such a feature so far to the south of the other identified structures indicates the ample size of the villa at Santa Susana, and may perhaps suggest other areas for excavation on the south side of the Igreja.

#### **OBJECTIVES, METHODS, & RESULTS OF THE 2014 FIELD SURVEY**

The 2014 survey took place in a recently harvested straw field immediately west of the river that borders villa Santa Susana. [WHAT IS THE NAME OF THIS PROPERTY? We should name the survey after the name of the farm.] The straw field rises sharply to the west from its foot at the river, and similarly, slopes to the north and the south from its crest. The north-south grade is gentler than the east-west rise.

The aims for the 2014 survey were twofold. First, to develop strategies for surveying larger tracts of land using a small team in a medium-intensive, non-collective approach, but still covering extensive areas at a reasonable pace without compromising data collection; second, to study the

area directly across the river from the villa site. The uninterrupted sightline between the villa site and the hill rising to the west of the river and their close proximity, combined with the river itself having produced archaeological material, made the hillside a natural choice for the 2014 survey. Since one of the Santa Susana Archaeological Project's main goals is to understand how local villas operate within their landscape, microscopically and macroscopically, studying the surrounding territories and their exchanges remains crucial, but to do so with only a small team, an appropriate methodology needs to be developed. The 2014 survey of the straw field consequently served as a methodological experiment in medium-intensity survey as much as it hoped to improve understanding of a previously unexamined area near the villa site.

### ***Survey Methodology***

Transects were laid out in a north-south fashion along a central east-west axis running perpendicular from the river up the hill. The transects measured 100m in length (north-south direction) and 10m in width (east-west direction). Each transect was divided into 25m increments, creating four 25x10m boxes. Transects to the north of the central axis were surveyed with field walkers walking toward the north; transects to the south were surveyed with walkers moving southward. Thus, the central axis became the starting point for all transects.

Five field walkers were spaced out evenly within each transect and walked side by side. Great care was taken to keep the line unbroken; thus, the surveyors had to move slowly. One walker trailed the field walkers to record data on conditions and visibility, taking GPS coordinates if needed. Field walkers used tally counters for all material they found, and were asked to note whether the material was ancient or modern. When ancient, field walkers were instructed to note identifiable characteristics: building material (brick/tile), stone, metal, and terra sigillata. If a field walker noted a particular cluster of sherds, the trailing walker would take a GPS coordinate on that specific location. The working assumption was that large clusters might indicate a subterranean structure. After each transect, the trailing walker recorded the tally counts for each walker within each section. No materials were collected.

### ***Problems and Consequences for Results***

The straw field had seen recent activity. The straw had been removed from the field, but in several locations, piles of straw were left on the surface, creating problems with visibility. In some places, low vegetation, chiefly ankle-height bushes and flowers, contributed to low visibility. Similarly problematic for visibility were the extremely bright conditions. The stubble and straw reflected sunlight almost like water or a mirror, sometimes severely limiting the field walkers' ability to see. Moreover, the north-south layout of the grid caused shadows to be cast as soon as the sun had reached a certain height, meaning that field walkers could no longer walk side by side, which may have had numerical consequences for the artifacts counted.

The terrain also influenced the results. While the incline was never steeper than was possibly to walk comfortably, the slope of the hill has consequences for how quickly transects could be laid out. When visibility was limited due to the curvature of the hill, it could take up to fifteen minutes to lay out a transect. The slope also has consequences for how the hill has been ploughed in prior years. A non-contextual collection of rocks at the bottom of the slope to the south suggested that material had been intentionally and gradually dragged there, perhaps to facilitate better ploughing. Similar piles of rubble were found along the river, out of the plough's way. Consequently, there is a risk that the repeated ploughing patterns have damaged potential subterranean structures, and similarly, that sherds and materials have traveled far from their original place of deposit.

### ***Survey Results***

Over the course of two weeks, 40 transects were surveyed, covering an area of 4,000m<sup>2</sup>. Preliminary study reveals no modern noise. This is a dramatically different scenario to the survey results of the 2013 autopsy of the area around the church of Santa Susana, where the survey revealed a great amount of modern noise and intrusion of materials from the cemetery, the farm house, and the road. A few very modern pieces of trash (a soda bottle, a shoe, some string from straw bales) were detected at the top of the hill, but these must be interpreted as contemporary.

The material itself was similarly different to the 2013 results. The Straw Field yielded almost no pottery but instead, almost exclusively building material – a stark contrast to the survey of the previous year. Brick, curved roof tiles, and pan tiles were all observed: notably, none were complete. A few fragments of sigillata were observed. The densest concentration of ceramics was

detected at the crown of the hill which is significantly higher than the surrounding areas. At present, it is unclear whether this is a consequence of no recent plough activity taking place at the crown of the hill. The lowest concentrations emerged closest to the river along the tree line. There were no significant clusters; thus, the cluster data could not be used to say anything convincing except that clusters seem to occur at random, even in sectors with a lower density of fragments.

The preliminary assessment of the medium-intensive survey strategies suggests that under similar conditions, a small team could cover at least one square kilometer in a single season while retaining a sufficient collection rate of numeric and observational data. It is clear, however, that visibility and terrain can severely complicate the success of such a medium-intensive endeavor. With declining visibility, the effectiveness of the spaced-out field walker method will also decline. Yet, simple note-taking and the use of tally counters will be sufficient if no detailed occupational data is necessary. Thus, this method could be used in conjunction with a more intensive collection survey of transects that have been identified as having a significant sherd density or more easily datable pottery. Therefore, the approach seems to lend itself to inter-site survey and the detection of new small sites on borders and the outskirts of villa territories: precisely the methodology needed to meet one of the Santa Susana Archaeological Project's main goals.

The straw field data raises several important points. First, the consistent appearance of ancient building material throughout the entire 4,000m<sup>2</sup> survey area suggests that structures made from these materials must be located reasonably close by. The contrasting lack of pottery and other finds suggests that the area may not have had an occupational history as a place for the living; rather, a tentative interpretation suggests that this area may feature a necropolis or at least scattered graves. The survey material is corroborated by the early Christian tombstone now in the Museu de Évora (ME 4113). The few fragments of sigillata, combined with the preponderance of tile fragments, point to a general date in the Roman period, concomitant with the villa itself. The straw field area may consequently have served as the villa's own necropolis.

Yet, these observations are only preliminary. To understand the connection between this area west of the river and the villa site itself, the large field separating the villa site from the river must be investigated. Here, locals have reported seeing "painted tiles" during ploughing in the 20th century. Moreover, the river itself, and its two banks, is in need of examination, although modern materials are abundant here.

## CONTEXTUALIZING SANTA SUSANA

1. Luso-Roman cultural contact
  - 1.1. landscape transformation
  - 1.2. genealogies of practice in villa-making
    - 1.2.1. Comparanda of villas in the region