Roman Peasant Project 2010
Excavations at Case Nuove and San Martino, Cinigiano (GR)
Report submitted to the Soprintendenza per i Beni Archeologici della Toscana

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Introduction
The Roman Peasant Project was founded in 2009 to excavate the houses, production facilities and other spaces of the Roman rural poor. Based in the Comune di Cinigiano, it constitutes the first ever attempt by archaeologists to understand the architecture, diet, land-use, and landscapes of a class of people who formed some 90% of the ancient Roman population. It is an international collaboration of archaeologists, geologists and biologists, coordinated by Università di Grosseto, University of Pennsylvania and Cambridge University. The project is directed by Kim Bowes (UPenn), Mariaelena Ghisleni (U. Grosseto), Cam Grey (UPenn) and Emanuele Vaccaro (Cambridge). The project is funded by the University of Pennsylvania, the Loeb Classical Foundation, and the Fondazione Montecucco.

This was the project’s second season, in which we excavated two sites found during Ghisleni’s 2006-2009 field survey – Case Nuove and San Martino. Prior to excavation, surface finds led us to identify Case Nuove as either a small settlement or industrial site, and San Martino as a small inhabitation or farm.

The Project was held from May 31- June 25. Both sites were excavated simultaneously, San Martino with a team of two specialists and 6 students for a period of 8 days, and Case Nuove with a team of two specialists and 7-16 students for a period of four weeks. A geoarchaeological survey of the surrounding landscape was carried out around both sites by Dott.ssa Antonia Arnoldus (DIGITER, Inc.) and pollen and paleobotanical sampling was carried out by Prof.ssa Anna Maria Mercuri (U. Modena). Ceramics were studied by Dott. Emanuele Vaccaro; faunal material was studied by Prof. Michael MacKinnon (U. Winnipeg).

We would like to thank Dott. Luigi Tondo for his assistance and advice throughout the project. We would also like to thank Sig. Machetti and la società Colle Massari nella persona del Dott. Luigi Tipa for permission to excavate on their land, and the Comune of Cinigiano.

Case Nuove
Case Nuove is located atop a small poggio on the estate of Colle Massari, and is set some 500m from the only villa in the Comune, located at Santa Marta (Ghisleni 2008).
Remote Sensing
Surface survey carried out in 2008 had revealed a small site at Case Nuove, comprised of three clusters of remains measuring from N to S 28x13 m; 13x12 m; 10x10 m; and included tiles, some over-fired, and some very few domestic ceramics of late Republican/early Imperial date (including Terra sigillata Italica). These finds suggested a small manufacturing site, perhaps related to tile production.

Geophysical analysis, carried out prior to excavation with an Overhauser GEM (GSM-19GW) magnetometer in walking mode over a 50 x 50m grid. A major circular anomaly (A1) was located in the grid’s SE quadrant. To the NW of this, two smaller anomalies (A2-3) were detected on a line running SW by NE, while a fourth anomaly (A4) lay some 15m to the north of A1. The strength, size and shape of A1 suggested a kiln site and thus supported the initial identification of the site as a tile production facilities (See Figure 2).

Excavation would later find both hypotheses false. Excavation revealed a small manufacturing site of uncertain function with no kiln.

Excavation
The entire area that produced either surface debris or magnetic anomalies was excavated, as well as a further extension to the south, for a total area of 985 mq. Top soil was removed with a scrapper, generously donated by Colle Massari.

Archaeological strata were encountered immediately beneath the top soil in many areas, while in others, the top soil lay atop the natural geology (see below). The discovery of plough marks in and around both of the excavated opus signinum surfaces, and the general absence of preserved stratigraphy between features, both pointed to poor stratigraphic preservation owing to both wind erosion on this exposed hilltop and later ploughing. Thus, nearly all intact stratigraphy was found inside negative features (tanks, pits, etc.) and virtually none identified between these features.
The absence of contexts connecting these negative features made it difficult to document their chronological and functional relationships.

As excavated, the site was dominated by a series of negative features, principally clustered at the hilltop’s S end. These features were seemingly excavated directly into the sand or clay loam that makes up the hilltop (see below for detailed analysis of the hill’s geology). The below description begins at the N and continues clockwise (Figure 3).

![Figure 3: Case Nuove, overall site plan.](image)

At the site’s northern limit was found a large (18 mq) oval cut (US 5062), revealed on the geophysical survey as A4. The cut contained a mixture of small pebbles, seemingly derived from the local bedrock conglomerate (see below), broken tegulae and imbreces, large fragments of broken dolia, and a modest assemblage of domestic ceramics and animal bones. This mixed fill spread out and covered the cut, while the stratigraphic contexts of which it was comprised assumed a variety orientations, suggesting a series of tips. The cut was thus identified as a dump and its contents as construction debris (including excavated conglomeric bedrock) from the sites’ various installations, as well as a lesser amount of debris from the site’s use period. The interpretation of the broken tile will be taken up below.
Some 10m to the south of this cut lay a rectangular surface of *opus signinum* (US 5015), revealed on the geophysical survey as A3. Excavation beneath its surface revealed that its base of small pebbles and mortar, was cut 30cm into the hillside. Atop this base was laid a smooth surface of *opus signinum*, measuring 3.50 x 2m, which had been badly damaged by ploughing. Enough remained of the edges to ascertain that the surface had been surrounded by a wide lip, also of *opus signinum*, which originally stood to a height of about 10cm. The remains of a dividing lip were visible, separating the southern third of the surface but no other channels or divisions were preserved, nor were any other connecting drains or installations found in its immediate vicinity. This installation was identified as a work surface, rather than a true tank, whose thick base pointed to its use for some kind of compressive activity, such as mashing or kneading.

Moving clockwise to the south, a large square cut (US 5059) was excavated at the spot where the geophysics had indicated large circular anomaly (A1). This cut was also made into the hill’s loamy clay and was approximately square (3x3m) with straight edges and sides extending some 1.2m deep. The cut was filled with successive tips of broken roof tile, medium (20-30cm in length) river cobbles, while the top-most level was rich in charcoal. Large quantities of faunal material was recovered from most of the contexts. The original function of this deep, regular pit remains unclear: it seems too regular to be simply a container for rubbish and we have hypothesized that it was made to extract clay. Examination of the clay layers within the pit, however, did not reveal that the clay at this point was particularly fine; indeed, its loamy texture would have made it unsuitable for ceramic manufacture, although it could have been used for pisé construction, as a matrix in mortar, or other construction functions.
The furthest southern point of the site was marked by a large, circular feature, almost certainly a cistern (US 5047). The geophysical survey did not extend to this part of the hill. Measuring 11 m² and 1.9m deep, the cistern was lined with opus signinum. A small cavity for collecting the dregs of water was set in its floor while collapse recovered inside the cistern indicated that the whole was originally covered by a domical roof composed of opus caementicium with stone and re-used tiles, including some wasters. The absence of any piped entrance or egress suggests that the cistern collected rainwater, and was vaulted to prevent evaporation. Although the remains of the collapsed vault were too fragmentary too permit a reconstruction, we must imagine a hole in the top to permit the water to be drawn out and rainwater to collect.

Moving to the NE, we encountered a cluster of excavated features whose proximity suggested joint function. The most monumental of these was a rectangular tank (US 5005), oriented NE/SW, built of tile and, lined, like the work-surface and cistern, with opus signinum. Measuring 2.5 x 1.5 x 0.44m, the tank had a capacity of c. 64 liters. Like the cistern, the tank had a slight depression off-center to permit the last remains of liquid to be bailed out.
No pipes, channels or other connection were found extending from this tank. However, three installations were found in the immediate vicinity (Fig. 7). To the south, two post-holes were uncovered 90 cm from the tank’s south side (US 5068 and 5064) The larger (US 5068) measured 55 cm in diameter and was at least 126 cm deep: we were unable to excavate to the bottom. The second, some 8 cm to the east, was smaller at 30 cm in diameter. It’s hole was 78 cm deep and angled toward the larger post-hole, suggesting a buttress leaning against and the larger post. The great depth of both holes, and the absence of any other post-holes in the area, suggest the erection of something that required a particularly stable anchor – perhaps a hoist or a press – rather than a covering structure or storage racks.

Figure 7: Features to south of US 5005: US 5066.

To the south of these post-holes were uncovered a cut of unusual shape (US 5066). A narrow, long cut, running NE/SW – that is, along the slope of the hill and parallel with the tank – opened into a shallow, rectangular basin, in the S side of which two more short, narrow cuts were made. This cut was interpreted as either a channel and associated small basin, or the excavated base for a beam and anchor-point, respectively.

Immediately to the north of the basin, a shallow, oval cut was unearthed, measuring 0.58 m (long diameter) and c. 0.26 m deep (US 5042). The fill of the cut was largely empty of finds or organic material. We tentatively identified this cut as the excavated base of a dolia, fragments of which were found in the northern dump (described above).

While no stratigraphic or other relationship was found linking the tank, post-holes, cuts and dolia base, we believe all four function contemporaneously as part of the some as-yet undetermined processing step, probably involving liquids and perhaps pressing.
Immediately to the W of the tank was a deep, stone-lined structure (US 5055). Measuring 1 m in diameter and at least 3.17 m deep (the bottom was never reached), the structure was lined with medium-sized, un-worked marley limestone laid together without mortar. The structure was filled with collapsed stones, seemingly from a destroyed, above-ground extension, carbon-rich, loose dark soil, and a high number of animal remains – including a complete skeleton of a dog. The fill contained very few ceramic finds. The structure was identified as either a well or a storage silo: the absence of a hydraulic lining, and the general paucity of ceramic which one might expect around and inside a well indicates slightly in favor of the silo hypothesis, but only slightly. We hope that paleobotanical examination of the fill will provide some answers, although, most of the fill contexts derive from the abandonment of the structure (as the complete skeleton of animals who had fallen in attests), since we were never able to reach the lowest levels.

**Chronology**

The absence of any living levels, or any contexts unifying the negative installations described above meant that the only chronological indicators were the fills of these installations, all but one of which (US 5059) were produced during the abandonment of those installations. The ceramics are still under study, but preliminary results suggest the foundation of the site and its major period of use during the late 1st c. B.C. to first half of the 1st c. A.D. The fill of the tank (US 5005) included a well-preserved assemblage datable between the late 1st c. BC. and early 1st c. A.D. including arretine sigillata and fine wares. Similarly dated is the more limited material from the dump (US 5052), which unlike the tank fill, should relate to the use, rather than abandonment, of the site. The material of the dump seems to date to the 1st c. A.D and includes vernice near, Dressel 1 amphora and coarse table, storage and cooking.

The cistern, on the other hand, contained material dating as late as the 2nd half of the 2nd c. A.D. including sigillata Africana A, sigillata orientale B, common table, storage and cooking wares of regional production, as well as some Italic and imported amphorae. Although we have no evidence for the construction date of the cistern, we have supposed it was built along with the tank, work surface and associated features. The presence of later material here may have remained in use after the other functional areas had been abandoned.

The fill of the square cut (US 5059) was the only area of the site that contained amounts of late antique ceramics. Th cut with filled with what appears to be series of a roughly contemporary tips, given that ceramic from each shows no real temporal variation. These tip contexts include a few examples of sigillata africana datable to the 1st half of the 5th c. A.D., above all a tight assemblage of regional ingobbitao di rosso and cooking pots.
The few ceramics found in the excavation of the silo were not helpful in establishing the date of its abandonment, namely one fragment of Hayes 50 (3-4th c.) in an later context and a fragment of vernice nera in a lower, earlier context.

**Site Function**

The site’s function in both periods remains unclear. During Phase 1 (1st c. A.D.-B.C.), the site seems to have consisted of a cistern set some distance from the site’s center, a work surface, a tank surrounded by a dolium and possible machinery, and a possible storage silo. The size of the single tank (some 64 liter capacity) and single work surface both point to small-scale production. Tank and cistern suggest a liquid product requiring the admixture of water.

We had originally assumed this was a tile production site, one of many of late Republican/early imperial date which Ghisleni has found in the Comune. While over-fired tiles were found in the dump, and tile wasters were found in the cistern fill, these seem to have been used as construction material: no kiln was identified, or nor was there sufficient charcoal or burnt clay remains that would point to ceramic production.

Wine or oil production is a possibility. However, no pits were visible to the naked eye in any of the organic-rich contexts, and the scale of production seems too small for even the processing of a single field of olives or grapes. Other agro-processing of more obscure product is also a possibility: nut oil or hemp. Dott.ssa Alessandra Peci (Universität de Barcelona) is carrying out residue analysis on the opus signinum of the tank and work surface, and the dolia from the dump, in hopes of tracing the substance produced here.

The location of the site is also an important consideration: why was this hilltop, far from water sources, chosen for this processing site? Examination of the hilltop’s geology (see below) indicated the proximate presence of distinct layers of calcareous conglomerate, clay, loamy clay and sand. Perhaps the availability of these different geological materials may have motivated the choice of the site, in which case we could imagine the manufator of pisé or the matrix for mortar (although not the burning of limestone).

The site’s 1st c. B.C.-A.D. function should be distinguished from that during late antiquity, when the previous installations were filled with debris and out of use. The large square cut (US 5059) contains a majority of late antique ceramic material and is the only place on the site such material was found. It thus seems possible, even likely, that the cut itself is late antique, as well as its fill. The cut had no indications of a floor, roof or surrounding structure. What purpose did it serve? An extraction point for clay or other building material seems most likely, although why that extraction should take place here, where no other building has been detected, remains a mystery. The pit was then seemingly deliberately filled in, as the layers of tips and inclusion of non-local riverstone (see below) indicate. This may have been done to prevent animals from falling in and injuring themselves (as they clearly did in the case of the silo/well).

**Hydrology and Geology:**

Case Nuove site is located upon a hilltop in the rolling/hilly reliefs of Pliocene conglomerates at a height of about 300 m a.s.l. (Fig. 3).
Fig. 9. View towards SE over the initial tract of the Fosso Cortilla valley (the river runs from left to right); the Case Nuove excavation is just visible upon the right hilltop; to the left the slopes of the Santa Marta area.

The other archaeological sites nearby (among which the Villa Santa Marta) are located along a slope in the same geological formation, extending south-westwards and downwards from the hilltop locality Santa Marta (at ca. 290 m s.l.m.) towards the valley of the Fosso Cortilla, a minor tributary of the Ombrone river (Fig. 10). The lower parts of the slope are made up of Pliocene clays and fine sands, which form a kind of shallow depression that accommodates the initial tract of the Fosso Cortilla. South of the site, the valley begins to be steeply incised with a narrow valley floor.

Several small springs are present in this area\(^1\). These are:
- the Fonte Santa Marta (indicated as 1 on figure 10), still active;
- the Fonte del Prete (2a), which recently has been moved to a lower position (2b) before the planting of a vineyard (see figure 25); I estimated the present flow at about 0.02 liters/second;
- several springs (3) were said to be present just below the road leading to Volpaia;
- considering the alignments of abundant vegetation, more springs could be present in the tract between Case Nuove and the Villa S. Marta.

\(^1\) The springs were indicated to us by Giuliano Guerrini, agronomist and manager of the Colle Masari farm.
Figure 10. Physiographical/morphological position of the Case Nuove site. Contour lines equidistance 10 meters. In red the modern roads, in blue the rivers and springs. In black are indicated the water sheds, showing clearly the site's position upon the water parting between the basins of the Torrente Trisolla (to the north) and the Fosso Cortilla.

The area around Case Nuove is located near the transition between the Pliocene hills to the east and the much steeper and older “macigno” reliefs to the west. (Fig. 11) From the strike and dip directions indicated on Figure 11, it becomes clear that in this area the Pliocene layers are intensely folded. To these data we can add the observed dip angle of 25°/30° S of the sandy-conglomeratic layers exposed to the south of the site (indicated as “GPS35” in Fig. 5).

It also becomes clear from Figure 11 that the position of the springs close to the archaeological site must be related to the transition between the Lower Miocene “macigno” sandstone and the clayey and fine sandy layers of the Pliocene formations. We may presume that, in this case, the rather permeable sandstones contain the groundwater (aquifer), which is forced to the surface by the clayey and fine sandy layers.
Figure 11 - geological map of the area around Case Nuove, based upon the 1:10,000 map of the Regione Toscana, sheets 320050 and 320090. In red the modern roads, in blue the rivers and springs. In black are indicated the water partings. The symbols indicate the strike and dip (in degrees) of the layers directly around the site, as indicated on the geological sheet 320090.

A detailed map in scale 1:200 of the geological layers exposed at the surface of the excavation has been drawn (Fig. 12). In the northern part of the exposed surface the layers have a strike ca. NW-SE and a dip of 20° to the W, whereas in the central part the strike changes abruptly to SSW-NNE, with a dip probably towards E (the latter not observed). A dip towards W is also visible in the natural layers of the western and eastern walls of the square pit ("p" on figure 12). These local measurements are coherent with the values indicated on the geological map of Figure 11 directly to the north of the site (dip 35° to WSW, strike NNW-SSE) and to the south-west (dip 25° to SSE, strike WSW-ENE).

The layers distinguished on the surface of the excavation area are (Figure 12):
- “Northern” structural domain (all layers calcareous):
  - C1: conglomerate, medium sized pebbles (5-8 cm), with a reddish weathering (also exposed in the walls of the square pit!)
  - W1/W2: whitish clay loam, highly calcareous
  - R: orange-reddish clay loam
  - G: light-grey loamy fine sand, with some fine-sandy loamy layers
  - DR: brick-red clay loam
  - GS: light-grey fine-sandy loam
  - GC: grey clay loam with very fine sand, locally with small calcareous nodules (also exposed in the walls of the square pit!)

- “Central” structural domain (all layers but S1 calcareous):
  - C2: sandy pebble layer, small sized pebbles
- S1: fine reddish sand, slightly loamy (non to slightly calcareous)
- S2: fine yellow sand, slightly loamy
- S3: greyish loamy very fine sand, with red mottles
- B1 / B2: silty clay with cm-size white calcareous nodules.

In some areas the geological layers were not visible because of the presence of excavation dump and other disturbances (D), or elsewhere beneath the pebbly soil layers (N).

The transition between the two “domains” seems to be rather abrupt, or anyway within a few meters (blue dashed line in Figure **). The presumed well or silo (“w”) is located in the central-western area of the excavation. It is possible that it’s position so close to the transition between the two structural “domains” is not casual, although it is difficult to be more specific on the topic.

Fig. 12 - geological map of the area surface of the Case Nuove excavation, original scale 1:200, in yellow the areas were the layers were visible, in red the archaeological features. Legend see text. Red double arrows indicate the strike direction of layers, green arrows the dip direction; the blue dashed line indicates the limit between the two structural “domains”; w = ”well”, p = square pit.
The building stones encountered at Case Nuove are mainly rounded and subrounded pebbles and boulders, average size 8-10 cm, up to 30-35 cm, and, subordinately, subangular marly limestones, size up to 50 cm.

The pebbles could well originate from the Pliocene conglomerates, a formation that in particular in the south-western part of the mapped area contains rounded pebbles and boulders of that size. The closest outcrops of marly limestones belong to the Flysch formation.

A good places to collect both pebbles and stones could have been the large natural outcrop of the Flysch formation along the Ombrone near Sasso, and the pebbles and stones accumulated down there in the river bed. The “road” distance from this place to the site is ca. 6.5 km.

San Martino
San Martino is located in the northern part of the Comune, to the south of Borgo Santa Rita. It lies upon a gentle slope in a fertile plain, near to the Fosso Vallanzo, a minor tributary of the Orcia river.

Remote Sensing
The site at San Martino was discovered during field survey in 2008 (Ghisleni 2010). Surface materials consisted of a 10 x 15m scatter of tiles, and a few sherds of domestic ceramics,

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2 The same limestone is used in the older houses of the village of Sasso d’Ombrone. Presumably those derive as well from this outcrop, since, according to our information, no other quarries of such a stone are known in the area.
including vernice nera, arretine sigillata and numerous dolia fragments. The site was identified as the inhabitation of a single family or small farm.

Figure 14: San Martino, remote sensing results, overlayed with excavated remains. Surface survey results indicated in red; geophysics underlay; black hatched line is the initial excavated area, later extended.

Geophysical analysis, carried out prior to excavation with an Overhauser GEM (GSM-19GW) magnetometer in walking mode over a 35 x 50m grid. Aside from a large anomaly in the northern part of the grid representing a modern cement power pole, and two other signals whose strength and linear shape suggest modern metal debris, possible archaeological responses were very weak. Only a small collection of low-level anomalies in what emerged as the building’s SE corner may have been archaeological in origin.

Excavation

Because the area was under grain cultivation and so as to pose minimal disturbance to the crop, only the areas that produced geophysical anomalies and exhibited the strongest concentration of surface remains were excavated. Trial trenches were later extended to the N and S, and revealed no further living levels. It thus seems likely that the entire site was excavated, although further trial trenches would have to be extended to the S to be certain.
Top soil was removed with a scrapper and was found to overly abandonment levels at c. 40cm, and, in places, the walls themselves. The displacement of the S end of the W wall, and the absence of large sections of the E wall, were attributed to plough damage. The building’s beaten earth floor was missing in its southern entirety. Nonetheless, make-up levels, one buttressing trench and other features were found preserved, indicating that the site was damaged, but not entirely.

The excavations revealed a roughly rectangular building, measuring 7x6m. The building site was first leveled up (US4003), and the stones of the walls partially set into the leveling layer. These walls were nowhere completely straight, nor either of the two preserved corners 90°, and were composed of a variety of unshaped limestone blocks (see below). A cut against the W wall (US4005) which contained a small, but well-preserved collection of ceramics, may have contained a buttressing pole, against which rubbish was thrown to fill in the hole. The absence of large quantities of stone in the top soil or abandonment levels suggest that the walls were originally composed of clay pisé, set over a stone socle, only the latter of which is preserved. Virtually no roof tiles were recovered from topsoil or any other context, suggesting that the structure was roofed with perishable materials, such as reeds or straw.

In the NE corner, segments of a beaten earth floor were preserved, which extended out 50 cm opening in the N wall. This opening thus seems to have been the building’s only door. Outside the
building to the S, a second, fragmentary hardened surface of gravel was found, running parallel to the S wall. This was identified as a drip edge, used to catch the water running off the roof and prevent the adjacent soil from being eroded. As this drip edge was identified only on the south wall, and given what appears to be the very rudimentary construction of the whole building and the location of the probable door to the N, we hypothesized a single-pitch roof, running down from N to S (see Fig. 16).

Inside the building, a variety of make-up levels and other contexts were identified, but none could be classified as installations. In the center, a series of darker clay infills were located; originally thought to represent the fragmentary remains of a hearth, they were deemed insufficiently rich in carbon and lacked clear edges. These may have been patches to the now-destroyed floor. Other similar levels were located outside the building to the W, but insufficient finds and no clear edges led us to conclude that these likewise represented infills to dips in the natural clay, possibly made to level up the surrounding yard.

Chronology:
The ceramics collected on the site were few and some contexts were heavily abraded. All dated from the late 2nd c. B.C. through to the early 1st c. A.D. It may be possible to distinguish two groups: the make-up levels into which the site was built were contain some vernice nera forms of 2nd c. B.C. date, and did not contain any Arretine Sigillata. The very fragmentary living levels, including the small deposit against the south wall, contained somewhat 2nd-1st c. B.C. Black Glaze, 1 Dressel 1 amphora, and the floor and the topsoil contained a few fragments of Arretine Sigillata. It may be possible, then, that the site originated in the early to middle 1st c. B.C., perhaps with an even more ephemeral phase that was wholly undetected by us, and was abandoned in the Flavian period. However, the collections upon which this chronology is based are so small that the differences between these two “groups” should not be overemphasized.

Function
Aside from the aforementioned possible buttressing attempt and the possible infills, the site seems to represent a single phase of use. The almost total absence of faunal material, minimal domestic rubbish, as well as the lack of any clear cooking installations, has lead us to propose that San Martino was used only sporadically and did not serve as a true “house” or “farm.” A seasonal work site is one possibility. The excellent soils around the site (see below) are ideal for grain production and a site used only during the harvest months is possible: the fact that the building’s only door faces north likewise points to summer use.

Hydrological and Geological Contexts
The San Martino site (altitude about 125 m a.s.l.) is located upon a gentle slope within a particular landscape composed of a fluvial system dissecting shallowly the rolling landscape of the Pliocene clays down to the level of the intermediate terrace of the Orcia-Ombrone river system. The site is close to the Fosso Vallanzo, a minor tributary of the Orcia river, running northwards (see Fig. 16).

The map of Figure 17 is based upon the geological maps of the Regione Toscana in scale 1:10,000, sheets 320010 and 3200503. The Lower Pleistocene travertine / limestone is not indicated on these maps, but derived from the geological map in scale 1:100,000, sheet 128 (the two outcrops to the east) and to field observation (the outcrop to the left) (See Fig. 18). This geological formation is important, as it is probably the source of the building material found at San Martino.
Fig. 16 - physiographical/morphological position of the San Martino site. Contour lines equidistance 10 meters. In red the modern roads, in blue the rivers and spring. In light blue the three known local outcrops of Lower Pleistocene travertine / limestone (see text).

Fig. 17: geological map of the area around San Martino, based upon the 1:10,000 maps of the Regione Toscana, sheets 320010 and 320050. The Lower Pleistocene travertine / limestone is not indicated on these maps (see Fig. 18). In red the modern roads, in blue the rivers and spring.
The stones mainly used for building the structure of *San Martino* are hard travertine limestones, tendentially layered, and locally with cm sized holes. Subordinately we find medium sized pebbles, and rather large, reddish hard conglomerates made up of cm-sized pebbles. A few other stone types are present, among which non-calcareous marls.

Theses travertine limestones and conglomerates derive probably from a single formation, the lower Pleistocene travertines, specifically the travertineous limestones from the outcrops near Falsettaio indicated as 3, 4, 5 on Figure 18, and the conglomerates probably from the outcrop to the west of Poggi e Volpaia (2 on Figure 18).