

Sangro Valley Project: Report on 2005 Season

In 2005 the Sangro Valley Project continued work at its two current sites, a Samnite sanctuary on Monte Pallano and an Iron Age domestic site at Acquachiara.

Excavations at Monte Pallano 2005

Previous seasons work (1999-2004) at this site had uncovered a large, late second-century B.C., terrace wall of substantial polygonal masonry, delimiting a broad terrace partly built up of architectonic debris consistent with a sanctuary of the late Hellenistic period; this terrace itself has been shown to have an earlier, smaller, phase, probably belonging to the middle Hellenistic. The polygonal terrace wall is now known to have also constituted part of the perimeter of a quadrilateral area of which two sides have been located with certainty, and a possible entrance. The terrace itself is presumed to have supported some now lost structure (possibly a portico) related to the sanctuary; some of the faunal residues from the area may be related to sacrificial activity.

To the south a smaller, later, wall (8017) of probable late Republican date ran almost parallel to the polygonal terrace wall; beyond this was a cobbled area and series of walls tentatively identified as a Roman house; the cobbled area was later covered by a series of tips containing debris as late as the late first century A.D.; a midden and collapse horizon abutted the 'house'. There is a break in continuity in the late Republic (perhaps the point at which the wall 8017 was built to 'screen off' the abandoned sacred area); there was then rebuilding in the Augustan period and subsequent occupation down to the second century A.D.; one of these later structures had a fine tessellated pavement of terracotta cubes, and painted plaster on the walls; thus the area may have continued to have a religious function in the Roman period, but such continuity would buck the general trend for Samnium.

Further geophysical prospection and trial trenches to the north and east of the terrace precinct were begun in 2004 and continued in 2005. Excavation on the higher terraces revealed substantial amounts of tile and pottery, but no structures; there was, however, evidence of 'quarrying' of the kind observed elsewhere on Monte Pallano, with slabs of limestone being levered off the bedding planes; the pottery in the fill of this 'quarry' suggests that the extraction of limestone may have happened as early as the third century B.C.

Any temple in the area has so far proven to be elusive. As the 2004 discovery of a new temple at Capestrano further north in the Abruzzo demonstrates, such structures might be small, and consist of no more than a levelled bedrock platform surrounded by post-holes, with a *pisé* wall elevation.

To the east of the sacred precinct the wall 8017, which in 2004 was determined to have extended for at least 70 metres, was again the subject of further investigation, as was its relation to the remains of a polygonal wall found just to the

north. A small number of architectural terracottas were recovered from the pits dug, but the wall itself appeared in no new trenches.

Further study of a section revealed in 2004 showed not one but two repairs of the wall, which continued to be an important boundary marker at least to the end of the first century A.D. At the same time the ground level rose to the south, without corresponding increases in the height of the wall: by the second century it may have been a high kerb rather than a wall; the area immediately to the south may thus have become a sort of road. Further polygonal walls on an entirely new axis came to light; these may be associated with drainage rather than being structural.

Topographic recording with a Trimble total station, and Auto-CAD reconstruction work, have continued on the creation of a detailed digital terrain model of the top of Monte Pallano around our site, which will permit more accurate identification of possible buried structures in future.

Excavations at Acquachiara

In addition to its excavations on Monte Pallano, the Sangro Valley Project has continued a program of landscape survey and small-scale excavation work in the surrounding territory. This work builds upon and refines the data obtained by Lloyd from 1994 to 1998. The site identification activities which form the core of this work have a double aim: firstly to investigate through field and in-woods survey, geo-prospection, and selective excavation the nature of the rural settlement pattern suggested by the earlier field survey; and secondly, and more importantly, to use a range of techniques to assess the methodology of the survey itself, and to test the identification of what constitutes a site and the therefore the interpretation of 'offsite material' as achieved through survey.

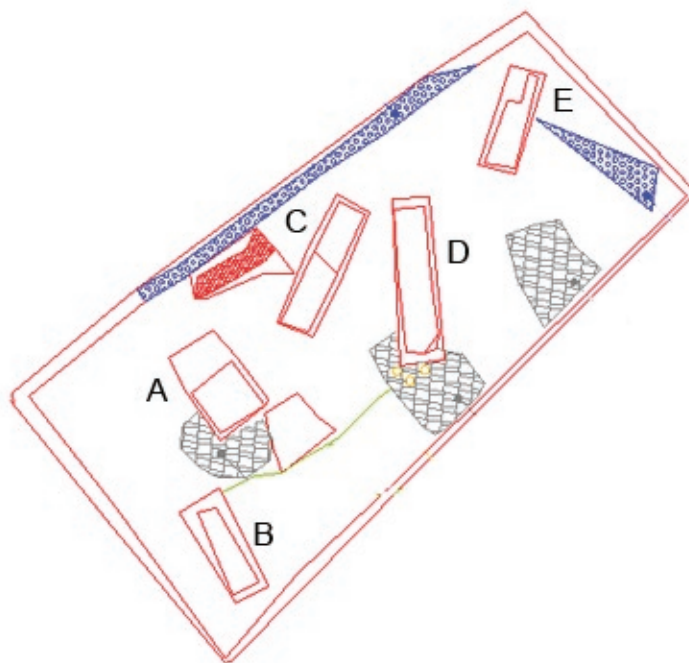
Re-examination of the field walking survey data at Acquachiara, for example, has resulted in the discovery of several important new sites, not all in areas predicted by Lloyd's survey. The first, discovered in 2002, is an early imperial farm complex that was engaged in commercial redistribution. Other Roman agricultural complexes have been postulated for the area, based on evidence from the earlier survey, but this discovery clearly demonstrates the actuality. The second (Trench 8000), found in 2004, contains a rare domestic site of early Iron Age date. These sites add substantially to discussion of the nature of Samnite rural settlement, which is still poorly understood in the Abruzzo.

Trench 8000 (2004 season)

In the 2004 season we took the decision, with the landowner's permission and in consultation with our colleagues at the Soprintendenza, to employ a mechanical excavator to cut an evaluation trench down slope from the terrace at the top of



Trench 8000 in the Acquachiara landscape



Trench 8000 plan, showing location of Sondages A-E

the field. The strategy produced surprising results almost immediately. The removal of the modern and colluviated ploughsoil at the top of the slope revealed a stone feature associated with large quantities of pottery. Further excavation revealed this feature to be a circular stone setting, approximately 1.5 metres in diameter, partially covered with a light yellow clay. Associated features included a possible terrace wall and a layer of rubble down slope of the features. Extension of the trench down slope to the south revealed only plough soils above natural clay, with few artefacts and no discernable archaeological deposits.

With the end of the season approaching and little time to explore the features in detail, investigation in 2004 focused on cleaning and recording the features and excavation was limited to topsoil and colluvium. A full written, drawn and photographic record was made, the features were covered with *tessuta* and the site was backfilled by machine. Examination of the ceramics recovered from the overlying colluvium and ploughsoil suggested a late Iron Age or early Hellenistic date, although dating remained tentative as there is currently no type series for these coarse wares which were probably in production for some considerable time.

Trench 8000 (2005 Season)

The objective of the 2005 season was to continue work in Trench 8000. At the start of the season, the area over the 2004 limits of the trench was re-opened with the use of a backhoe. Additional topsoil was removed from the immediate surrounding area in order to provide an expanded excavation area that included not only the 2004 Trench 8000 but also extensions to its north and east sides. This reopened area was approximately 15 metres long by 7 metres wide. The orientation of the opened area deliberately followed natural topography, with the line of the wooded terrace slope parallel to the northwest.

The excavation area was cleaned using hand tools. After initial cleaning it became clear that important deposits lay on the edges of the northern and eastern side of the trenches and the trench was further extended accordingly 0.5 metres to the north and 1 metre to the east.

Due to the relative complexity of the site it was decided to examine the area via use of an overall sampling strategy. Five strategically placed sondages (A-E) were positioned within the interfaces of the most interesting archaeological deposits in order to investigate their stratigraphy. It was envisaged that the archaeological information obtained from the excavation of the sondages would also inform future excavation strategy.

Brief Discussion of Sondages A – E

Sondage A contained the circular feature (8012) identified in the 2004 season which had been partially half sectioned. The northeastern quadrant was chosen for further excavation in the 2005 season. The objective of the quadrant was to gain further information as to its content and function. Due to the content of its fills it took longer than anticipated to ex-

cavate. These fills were not sterile, but rather contained large pieces of Iron Age pottery (impasto), a small number of regional finewares, and also fragments of bone. The function of the feature is still unknown but it appears to be sitting on re-deposited material. Interestingly the last fill contained several joining terracotta fragments (possibly from a votive terracotta) hinting at the high potential of this feature and the need for further investigation next season.

Sondage B was positioned in southwest corner of the trench initially to examine the relationship between the layers in this area and also their relationship with the circular feature (8012). The removal of a number of pottery rich layers did not however identify any evidence of a construction cut for the circular feature. A high volume of re-deposited pottery, a particularly high proportion of dolia-like vessels and bone were recovered from the deposits within this area. Most of the pottery and bone was highly abraded suggesting that it was not within its primary of context of deposition but that it had travelled down from the upper slopes.

Although the area was not fully excavated the sondage seemed to suggest that the layers were made up predominately of re-deposited natural clay, possibly washed down from the upper slopes. The circular feature (8012) either sits above or abuts this material. The clarification of this relationship is another task for the 2006 season.

Sondage C was positioned in the central northern area of the trench to examine the relationship between a cobbled surface which was visible over large areas of the excavation and the circular feature (8012) in *Sondage A*. The cobbled layer was also visible in *Sondages D* and *E*.

Sondage D was positioned to examine the stratigraphy underneath the pebbled surface, to show how it related to a light greyish yellow layer which extended over the southern portion of the excavation area. This survival of this layer was variable across this portion of the site. Within this layer four ceramic posts were identified. They appeared to have been truncated partially in antiquity and also during machine excavation. Their function was not clear and *Sondage D* was extended to incorporate one of them in section. Excavation showed that they had been placed into the soil and then the yellow clay deposit had been built up around them.

Sondage E was positioned to run directly underneath the linear arrangement of stones which ran northwest by south east across the east of the excavation area to determine if it was a wall. This sondage also examined the relationship of the cobbled surface and the linear arrangement of stones. After several days excavation it was decided to excavate a small slot (0.75 metre x 0.5 metre) in the north corner of the sondage in order to examine a context visible only in that corner of the trench in a short period of time.

Sondage E proved that the linear arrangement of stones (8034) was not a significant wall and that it was not related to the various surfaces that lay beneath it. It was not possible from the sondage to confirm if the context was a wall although



Trench 8000 looking south



Trench 8000 looking west



Detail of circular feature

there is no evidence of any bonding material and the remnants are only of a single course that varies in width and height significantly, it is entirely possible that it is just a line of stones created accidentally by ploughing.

Sondages C, D and E have identified a series of layers comprising small pebbles, clay and silt deposits, containing small fragments of pottery and bone. These are currently being interpreted as successive working surfaces. The most notable area was that of the four ceramic bricks set into one of the working surfaces within Sondage D. Work in 2006 will hopefully clarify the form and function of these deposits.

Conclusions

The investigations undertaken in Trench 8000 to date demonstrate a remarkable state of preservation in an agricultural setting. Although no doubt protected to an extent by a build up of colluvium, the stratigraphic sequence remains well preserved and relatively undamaged by modern ploughing. Although there are no widespread systematic surveys of the cumulative effect of plough damage on archaeological sites in this part of Italy, there can be little doubt that survival such as this is becoming increasingly rare.

The area is one of high residuality, with large quantities of Iron Age pottery from a number of dates, and a little Classical / early Hellenistic material. Further study of the artefacts may help to characterise the date range of the stratigraphic sequence, although the probable longevity of the ceramic forms and fabrics, and the absence of secure type series may be problematic.

The area seems to be an ancient terrace, which between the seventh and fourth centuries B.C. was surfaced with a series of floor preparations, alternating between gravel and beaten clay. There was evidence of the systematic use of fire, probably for cooking or food preparation; and fragments of quernstone may be linked to wheat seed recovered by flotation. The absence of plausible post-holes and the paucity of daub suggest that this was an *outside* area, delimited from the surrounding fields by a low wall and a terrace.

It is tempting to suggest a link with this site and a nearby Iron Age cemetery, known from the recovery of statue fragments including the "Atessa Torso." The precise location of the cemetery is not known, although it may well be in view of the Acquachiara site. There is however currently a lack of tangible

evidence to substantiate this and the site is probably more accurately interpreted as a marginal area of an Iron Age village or hamlet where food preparation or processing of agricultural products took place.

Further excavation in 2006 season, combined with a more detailed examination of the artefacts and environmental evidence will hopefully enable a better understanding of his important area.

Other work at Acquachiara

Field to the north (upslope) of Trench 8000. The field above the excavation area was subjected to remote sensing (GPR) by USDA Forest Service archaeologists. Test pits were opened over anomalies identified by the GPR and these showed the depth of colluviated ploughsoil to have been considerable, but to overlie Iron Age horizons (as first suggested in 2001). No Roman structures were found, although a gravel preparation in one field looks late rather than early; a coin of Marcus Aurelius was found nearby where Roman farm structures were investigated in 2002-3.

Shovel testing. A programme of in-woods shovel testing was undertaken in the vicinity of the Acquachiara, to test artefact densities in topsoil in areas unsuitable for fieldwalking. Testing was carried out in two locations: in the woods to the west of the open fields and adjacent to the current excavation area. Using short handled spades and small picks, test pits were made every 20 metres along transects established using compass, laser range finder, and orange flagging tape. The test pits were initially 50cm x 50cm, and 40-50cm deep. The size was later increased to 60cm x 60cm, and 40-60cm deep due to the hard rocky nature of the soils. All artefacts recovered were labelled by transect and pit number.

The results were largely negative but encouraging none the less. The third transect attempted did produce a number of artefacts thought to be consistent with the results of fieldwalk-

ing in the vicinity. Refinements to the methodology, possibly to include decreasing the interval between pits and approaches to the excavation of the test pits may provide better results and will be tested in the field in the forthcoming season.

Acknowledgements

The season was conducted by the Universities of Oxford and Oberlin College, Ohio with the collaboration of the Soprintendenza per i Beni Archeologici dell'Abruzzo and the USDA Forest Service, Division of Heritage Management, and supported by the British School at Rome and the American Academy in Rome.

We are indebted to the landowners Erasmo Costantini and Simone Iannone for permission to continue the excavation of these important Iron Age and Roman sites on their land.

Our thanks also go to our colleagues in the Soprintendenza per i Beni Archeologici dell'Abruzzo, most particularly Dott.ssa Silvana Balbi De Caro and our colleagues Amalia Faustoferri, Silvano Agostini, and Sabatino Letta for their help and advice throughout the season.

We also express our deepest gratitude to Sindaco Luigi Iacovanelli and the citizens of Tornareccio for their hospitality and continuing support to the project.

Finally, our very presence, let alone our work, would be unthinkable without the kind and understanding support of various funding bodies, especially the Craven Committee in Oxford and a generous group of individual donors: William and Anabel Perlik, Mary Ann Danenberg, Aaron Levin, and Nancy McEwen.

We also acknowledge the support and technical assistance of Jim Barker and his associates at Aptigent in the USA; as well as that of Donato Attanasio, Nicola Tullo, Anna Pia Apilongo, Claudio and Paolo Tucci, Emiliano Fioriti (Sintesis), and Patrizia Di Tondo (Legambiente Atessa) in Italy.

2005 Preliminary Report on Environmental Samples: Off season laboratory work

Acquachiara

Analysis of the light fraction from the Acquachiara samples has so far focused on sondage A and sondage D in Trench 8000. These samples were prioritized because of initial observations made during flotation (comparatively more dense concentrations of charcoal and occasional observable seeds) as well as for their proximity to features of particular interest, such as the circular feature (8012), the pebbled surface in the northwest part of trench 8000, and the four ceramic posts positioned partially within and partially to the south of sondage D.

Samples taken from sondage A have proven to be particularly interesting so far. One sample taken in 2004 from the deposit overlying the circular feature (8006) was generally quite poorly preserved and contained very little charcoal, though six cereal fragments were identified. The sample from deposit 8033, the northwest quadrant of the circular feature, contained a well preserved lentil (*Lens culinaris*), as well as two more lentil fragments and a few fragmentary cereals of indeterminate genus. The most productive sample so far investigated came from the area immediately east of the latter sample (deposit 8013). This sample contains a very well preserved grain of emmer wheat (*Triticum dicoccum*), as well as a rachis, possibly also from *Triticum dicoccum*. Nineteen further cereal fragments were present in a state too poorly preserved for identification to genus. In addition, small weed seeds from two different types in the *Brassicaceae* family are present, as well as what may be a grape seed (*Vitis* sp.) in a very immature developmental phase. With regard to non-botanical remains, this sample also produced eight fish otoliths, including one of unusually large size (ca. 1.2 cm x 0.8 cm).

The samples from sondage D were also relatively productive. Two separate samples were taken from deposit 8031. One of these contained 9 cereal fragments as well as a small weed seed from the genus *Chenopodium*. The other contained 31 cereal fragments, one of which was identifiable as wheat (*Triticum* sp.). This represents the greatest density of cereal fragments per unit volume on the site so far, though the quality of preservation is unfortunate. Small fragments of burnt bone were also present in this sample, and were observed during flotation.

Conclusions: Acquachiara

Preservation is, as anticipated, generally unexceptional; it does seem to show some improvement with depth, however. This may be an indication of a change in post-depositional activity and disturbance, primarily that which is related to the plow zone, and is encouraging with regard to the potential for work at greater stratigraphic depths in 2006. Despite the problem of preservation, certain samples have already produced interesting assemblages. The interpretation of these groups will



Figure 1. *Triticum dicoccum* (emmer wheat); lateral, dorsal, and ventral views from top to bottom. Scale in center photo is 1 mm grid.

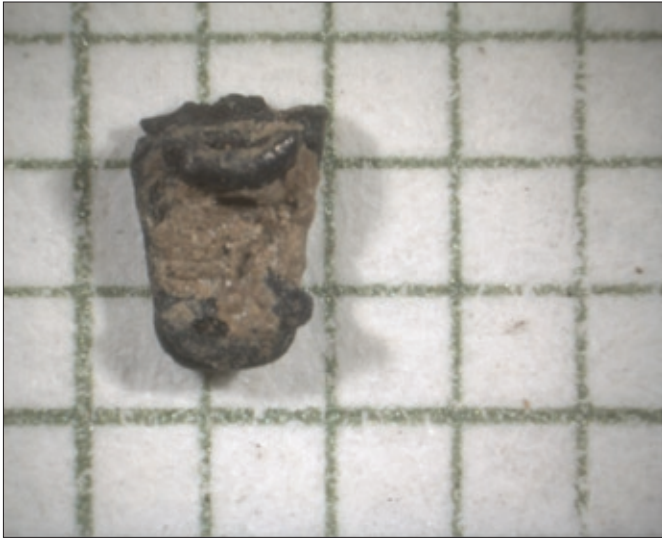


Figure 2. Rachis. Scale is 1mm grid.

improve with further analysis of the remaining samples and more detailed identification of the weed seeds. The presence of chaff (in the form of the cereal rachis) from sample 8013.7 is intriguing in terms of comparison between the Acquachiara site assemblage and the samples from Monte Pallano. The presence of chaff, along with small weed seeds, suggests a relatively early stage of crop production and processing. As pointed out in the 2003 Sangro Valley Environmental Sample report, no chaff was recovered from the samples sorted by/under the direction of Dr. Marina Ciaraldi, and this continues to be the case so far with the 2005 samples. This disparity occurs

despite a generally better level of preservation and less disturbance than is the case at the Acquachiara site. If this pattern proves stable in the context of future analysis, then it will support an interpretation of the Acquachiara site as functionally distinct from Monte Pallano. Although samples from the two sites do not appear to be chronologically contemporary in this case, this distinction encourages further research into the idea that the sites in the saddle of Monte Pallano may have served (periodically or consistently) as redistributive focal points for the inhabitants of the immediate region.

Monte Pallano

Analysis of the Monte Pallano samples has so far been limited to trench 10800 (deposit 10805), as the majority of time has been spent on Acquachiara samples. So far, this deposit has produced primarily a substantial amount of well preserved wood charcoal. There seems to be a substantial amount of oak (*Quercus* sp.) present. Of primary interest in this sample is the presence of the carbonized stems and internodes of a large grass (possibly *Phragmites* sp.). *Phragmites* is a wetland reed, and given its presence in a non-wetland plant assemblage, a tentative interpretation is that it may have been used as a building material: namely thatch. *Phragmites* has been recorded as thatching in England (east Anglia), Eastern Europe, and in the Mediterranean generally. It is, at any rate, an interesting avenue of interpretation. Continued work with the 2005 samples and continued collection in 2006 should clarify some of the issues introduced here.

Prepared by China Shelton