A new 3-year joint research project (2012-2014) has been established by The British School at Rome and the Archaeological Museum of Segni (Comune di Segni, Italy) to investigate a number of key areas of historical importance within the town of Segni, which lies approximately 50km to the southeast of Rome in the Lepini Mountains.

As part of the initial study, three areas were targeted with geophysical survey. GPR survey was used in the first area, located alongside the podium of the famous temple of Juno Moneta, now preserved as part of the church of St. Peter. The second site is an open field, in a prominent position on the acropolis, so both GPR and gradiometer surveys were used. The third area is located in Piazza Santa Maria, which is the main square of the town and hence could only be surveyed using GPR survey. This area is where the Roman forum has been hypothesised to have been located. The documentation of medieval activity in this area is more substantial and suggests the existence of an earlier cathedral complex. However, these historical documents fail to provide the exact location of the medieval cathedral and the modern square layout is suggested to have been greatly transformed since the medieval period (Cifarelli and Colaiacomo, 2011: 96).

A GSSI SIR-3000 was used for the GPR survey at this site, using a 400 MHz antenna mounted on a cart system with an odometer (Figure 1). A total of 165 traverses of varying length were collected zig-zag in a north-south direction, with a traverse separation of 0.25m.

The exceptionally clear results of the GPR survey display a sequence of high amplitude linear anomalies, which are likely to denote the walls of buildings (Figure 2). These features appear to share a similar alignment, providing an insight into the historical plan of this area. Furthermore, later phases of buildings have been built on earlier structures, suggesting some level of reconstruction as well as the possible reuse of building materials. There are two concentrations of structural remains: the first is along the north-western edge of the survey area, and the second is located towards the south-west of the survey area.

The area to the south-east of the survey area was therefore subsequently chosen to be examined through excavation. The GPR survey results suggested these structures occur at different depths, but have the same positioning and alignment, running parallel with the modern buildings that form the edge of the square. The shallowest structure occurs between depths of 7 to 13ns (depth estimation of 0.51m to 0.76m, correlated through depths acquired during the excavation). This structure appears to be formed of two rooms separated by a corridor. On the same orientation and directly beneath this structure, the remains of an earlier building are present. This earlier structure appears to be more substantial; being composed of three rooms with a central corridor, and occurs between depths of 13 to 31ns (approximately 0.76m to 1.77m).
The excavation examined an area of approximately 9m by 5m, allowing insight into the relationship between the anomalies within the geophysical datasets and the features exposed through excavation. The excavation confirmed the presence of several features identified in the GPR data set, and in turn provided a chronology for the recorded features. In particular, several floor surfaces were discovered, the most impressive of which is a late Republican mosaic (Figures 3&4).

The first year of the Segni Project has produced some interesting and exciting results. This project has been particularly beneficial as it has allowed for a scientific study in feature recognition of anomalies, as well as expanding the archaeological record of an important historical centre in Italy.

The Segni Project is directed by Dr Francesco Maria Cifarelli (Archaeological Museum of Segni) and Professor Christopher Smith (British School at Rome), and field directed by Stephen Kay (Molly Cotton Fellow, British School at Rome) and Dott.ssa Federica Colaiacomo (Conservator, Archaeological Museum of Segni). The geophysical survey was undertaken by the APSS (Archaeological Prospection Services of Southampton) and the British School at Rome (Sophie Hay, Alice James, Stephen Kay and Elizabeth Richley) and was made possible through the generous donations of the Banca di Credito Cooperativo Di Roma and the Banca Anagni Credito Cooperativo. The excavations are funded by the Comune di Segni (with particular thanks to the Mayor Arch. Stefano Corsi and the Cultural officer Dott. Valente Spigone) and the Society for the Promotion of Roman Studies.

Bibliography


Further information can be found at www.bsr.ac.uk and www.museosegni.it or follow on Twitter: @segniproject