

Rome and Byzantium on the Danube: the Noviodunum Archaeological project 2005–2008

Kris Lockyear, Adrian Popescu¹ and Timothy Sly²

The fortress of Noviodunum on the lower Danube guarded the border of both the Roman and the Byzantine empires. The Noviodunum Archaeological Project, based in the Institute of Archaeology, is an international collaborative project with the primary aim of investigating the changing economic relations between the fortress, its hinterland and the wider Mediterranean world. The project began in 2000 and the final season of fieldwork will take place in 2009. In this article the directors describe the work of the last four seasons and present preliminary conclusions.

Noviodunum is a large Roman, late Roman, Byzantine and Ottoman fortress on the banks of the Danube in Dobrogea, the eastern region of Romania (Figs 1 and 2). The river in this area has long been a frontier marking, for example, the edge of the Roman, Byzantine, Ottoman Empires and now the edge of the European Union. The *Noviodunum Archaeological Project* was started in 2000, and its preliminary seasons have been reported in this journal and elsewhere.³ The Project was awarded a major AHRC grant in 2004, and excavations have been taking place every summer since 2005. The final season will take place in the summer of 2009, with a small scale post-excitation season in 2010. The main aim of the project is to look at the changing economic relationships between the fortress, its hinterland and the wider Mediterranean world, principally during the Roman and Byzantine periods. In order to achieve this, two areas of the site have been excavated, and two of a proposed four rural sites, have been sampled. In addition, a large scale field survey has been undertaken in the rural hinterland of the site using the innovative survey system discussed by Clive Orton.⁴

Excavations on the Fortress (Area 1)

The first season of excavation in 2005 concentrated on opening up an area immediately behind the fortress wall, the line of which had been revealed, although none too clearly, by a resistivity survey. This area has continued as the main excavation over the four seasons so far and has consisted largely of a series of late Byzantine rubbish pits and dump layers, along with a series of beaten earth floors, post holes and beam-slots. At least one of these structures was burnt down as the carbonized sill beam remained *in situ*. Associated with these structures was a large dolium or storage jar (Fig. 3). These layers have proved very rich in finds, yielding over 1000kg of medieval pottery and about 160,000 fish bones. The pottery is currently being studied by Ben Jervis, Mihaela Ciaușescu and Clare Lewis. The medieval pottery consists mainly of jars

although some bowls, jugs and other forms were present. One particularly attractive vessel has a sgraffito and painted leopard design on the base.

Alison Locker, who is working on the fish bone assemblage, has so far identified seventeen species including sturgeon, carp, zander and wels, all of which could have been caught in the Danube. One of the wels (also known as the Danubian

catfish) was about 3m long! Alex Mulhall, a UCL student, undertook an analysis of the pig and cow bones from this area and demonstrated that approximately half the pigs on the site were wild boar.⁵ This, along with deer bones and wild fowl in the rest of the animal bone assemblage indicated that a large proportion of the diet in the Byzantine fortress was derived from hunting and fishing.

In 2008 we excavated a large layer of burnt mud bricks which directly overlie layers of very late Roman/early Byzantine date including a number of stone walls. This layer probably relates to the destruction and abandonment of the fortress in the first half of the seventh century. The aim for the final season is to excavate as much as possible of the late Roman layers in this area.

Due to funding restrictions, the original resistance survey was undertaken in the summer when the dry soil conditions were poor for this type of survey. We had



Figure 1 Location map of Noviodunum



Figure 2 Aerial photograph of the site



Figure 3 The dolium in Area 1 in situ

an opportunity to repeat the survey at Easter 2006 and the results were much clearer showing several breaks in the inner of the two defensive walls (Fig. 4). As a result, several test trenches were opened up to examine the nature of these breaks. The majority clearly represented robbing of the wall either in antiquity, the Middle Ages or the recent past. One trench, however, Area 1.7, revealed a faced edge to the wall which could be the entrance to a tower, or a gateway through the wall (Fig. 5). This area was expanded in 2007 and 2008, revealing reused masonry in the wall (*spolia*), as well as surviving ashlar masonry. In the later Byzantine period a small metal working workshop was set up in the lee of the wall.

A Ground Penetrating Radar (GPR) survey was undertaken on the southwest facing slope of the fortress below trenches 1 and 1.7 in order to expand upon the resistivity survey previously undertaken. These data are currently being analysed.

Excavations in the Cemetery and “Civilian Settlement” (Area 2)

Area 2 was started in 2006 with the aim of sampling the Roman civilian settlement, an area which in the Byzantine period had been used as a cemetery. Twenty-three late Byzantine burials were excavated in Area 2, all lying east-west and only one accompanied by a grave good, in this case a small iron knife (Fig. 6). From the preliminary assessment by Yvonne Edwards, there appear to be about equal numbers of men and women present, and 20% were juveniles at death. From the evidence of broken bones and other pathology, the people represented were used to hard manual labour, probably agricultural work. Stable isotope analysis of samples taken for radiocarbon dating have also indicated that, unsurprisingly, these people had a largely fish-based diet and further work will be undertaken by

Jane Sidell on the impact this has on the ¹⁴C dates.

Beneath the cemetery, where we had hoped to find evidence of the civilian settlement, we discovered a long, deep, irregular linear feature of Roman date. This feature contained a great deal of tile, as well as the burial of a child. It does not appear to be a drainage or boundary ditch and it seems most likely that it was a quarry pit for a Roman tile kiln, which had been excavated nearby in 1990 by the Romanian team. One of the tiles in the fill of the feature was an almost complete roof tile of seemingly unique design.

Excavations at Poșta (Area 3)

On the far eastern edge of the project survey area a Roman and late Roman site was examined during the field survey.

Part of the site was known from where it had been cut by a gas pipe and had been excavated previously. Due to the rich surface assemblage this site was chosen as the first of the rural sites to be excavated and a 10x10m trench was opened up, supervised by Doru Bogdan. It became apparent that the surface material had been turned up by a second unmarked gas pipe and the archaeology was buried under a metre of alluvium. Persistence paid off, however, when a large spread of Roman tile was encountered, clearly representing the collapse of a roof (Fig. 7). In amongst the roof tile was one which had two designs scratched onto it prior to firing. The top design consists of a horseman in armour, and the lower design two child-size feet wearing sandals in plan view (Fig. 8). Some of the tiles had stamps

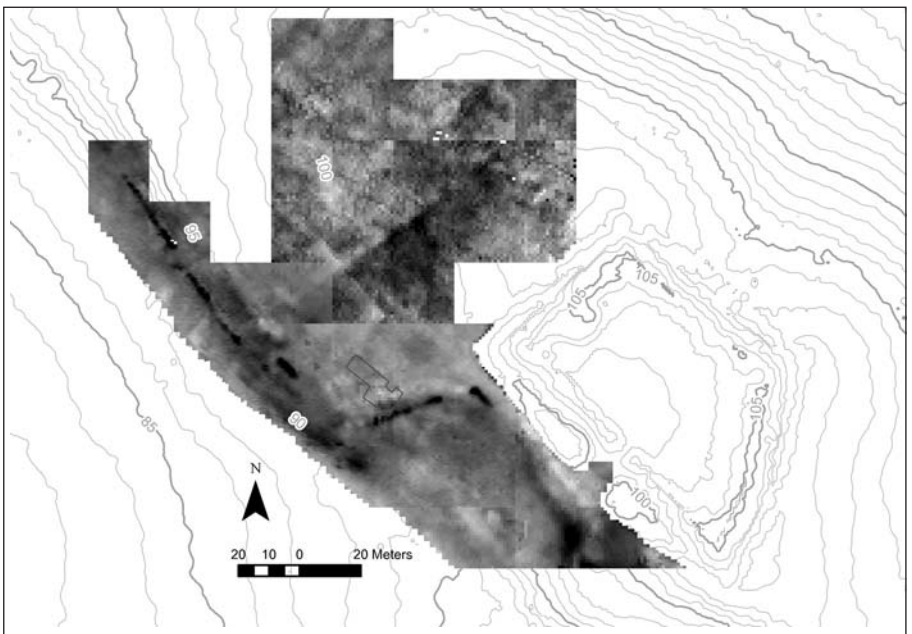


Figure 4 The resistance survey of the southwest slopes of the fortress



Figure 5 The entrance or tower in Area 1.7



Figure 6 Late Byzantine burial from Area 2



Figure 7 The collapsed roof of the probable military granary at Poșta

from the Fifth legion Macedonica and one tile was stamped by the Roman fleet based at Noviodunum. These tile stamps nicely date the structure to the first half of the second century, a date reinforced by the

pottery, coins and glass. Once the roof tile had been removed part of a structure was revealed which consisted of parallel walls with outer buttresses. It would appear

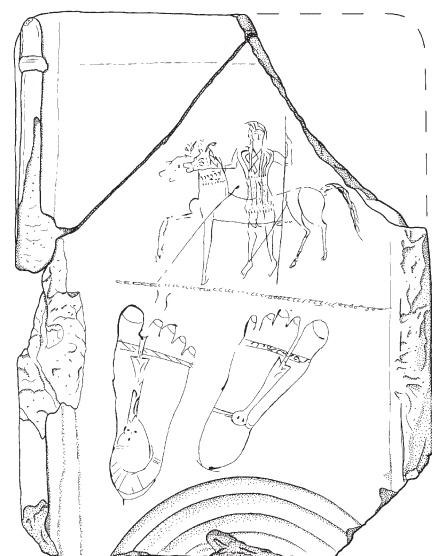


Figure 8 The roof tile with incised designs from Poșta (drawing by Frances Saxton)



Figure 9 The probable granary at Poșta

that this represents a granary of a hitherto unsuspected military supply base (Fig. 9).

Excavations at Suhát (Area 4)

Field-walking at this site had revealed a dense concentration of surface ceramics which made it seem an ideal site for excavation. Access problems, however, resulted in the placement of the trench slightly to one side of the area we had hoped to excavate. Although the site was very rich in finds of ceramics, it was lacking in features beyond the occasional pit and indeterminate layers. A prehistoric settlement was discovered underlying the Roman one.

Field-walking and other surveys

Six seasons of field walking in the hinterland around Noviodunum have been completed — carried out at Easter and at the end of the summer excavation seasons — using the “spot walking” method discussed by Orton.⁶ Over 13,000 “spots” have been examined, spread over more than 80 transects. The technique has been successful in locating new sites as well as collecting material from, and examining the size of, known sites such as the Roman settlement at Telița-Amza⁷ and the villa at Telița “La Pod”.⁸ The transects are located in the landscape using hand-held GPS and then plotted in the project’s GIS using Quickbird Satellite imagery as the base-map.

The field survey has examined a number of late Roman sites, but only one late Byzantine settlement contemporary with the later phases at Noviodunum. This site, near to the village of Parcheș to the east of Noviodunum, has been subjected to a magnetometry survey and is likely to be targeted for excavation in the summer of 2009. The magnetometry survey at

Parcheş represents the first of a number of planned surveys aimed at categorizing the sites discovered. Additionally, the area was flown over in the summer by Ioana Oltean and William Hanson, accompanied on one occasion by Kris Lockyear (see Fig. 2). Although no new sites were located in the NAP survey area, the site of Telița-Amza had excellent crop marks which have provided much more detail of this site, to complement the excavations along the line of a gas-pipe undertaken by V. H. Baumann and the fieldwalking undertaken by NAP. It is hoped that further flights might be possible before the conclusion of the project.

Conclusions

Although much of the fieldwork at Noviodunum has been completed, the next couple of years will see the hard work of post-excavation and analysis take place, working towards the planned publication of the project in 2013. Many of the aims of the project will only be realized once the detailed analysis of the finds is complete, principally the ceramics and the environmental evidence. We can already see, however, the impact of the need to provision the Roman military establishment along the shores of the Danube in the form of the granary, the naval base at Noviodunum and the widespread settlement and exploitation of the hinterland of the site. We have no evidence dating to the period between the abandonment of the fortress in the first half of the seventh century and its reoccupation in the second half of the tenth. Did the population become aceramic, or was the area largely abandoned? For the period after the Byzantine reconquest we only have two sites: the large and dense settlement on the fortress itself and its attendant cemetery, and the settlement at Parcheş. The environmental evidence shows the site was heavily reliant on fish from the river and hunted wild game, and it seems that the fort could not rely on the agricultural hinterland in the same way that the Roman site did. These preliminary thoughts need to be tested against the rest of the data, but give a flavour of how the varied work at Noviodunum and in its hinterland will contribute to our understanding of this part of the frontier over a period of more than a thousand years.

Acknowledgements

The project would like to acknowledge the major funding provided by the Arts and Humanities Research Council. The authors would also like to thank the students, volunteers, field archaeologists and specialists who have worked on the project since its inception in 2000. We would also like to thank our Romanian

colleagues, Victor H. Baumann, Aurel Stanica and Florin Topoleanu without whose help and cooperation this project would not have been possible.

Notes

- 1 The Fitzwilliam Museum, University of Cambridge.
- 2 University of Southampton.
- 3 K. Lockyear, "At the edge of empires: the Noviodunum project, Romania", *Archaeology International* **2002/03**, 21–24; K. Lockyear, T. Sly, A. Popescu, "The Noviodunum Archaeological Project 2000–2004: Results and Conclusions from the pilot seasons", *Peuce New Series* **3–4**: 121–58, 2005–6.
- 4 C. Orton, "Horse kicks, flying bombs and potsherds: statistical theory contributes to archaeological survey", *Archaeology International* **10**, 24–7, 2007.
- 5 A. D. Mulhall, *Wild or domestic? Metric analysis of pig and cattle bones from Noviodunum, Romania*, (Unpublished BA Dissertation, Institute of Archaeology UCL, 2008).
- 6 C. Orton, "Horse kicks, flying bombs and potsherds: statistical theory contributes to archaeological survey", *Archaeology International* **10**, 24–7, 2006–7.
- 7 V. H. Baumann, *Așezări rurale antice în zona gurilor Dunării*, 13–173 (Tulcea: Institutul de Cercetări Eco-Muzeale, 1995); V. H. Baumann, "Noi săpături de salvare în așezarea rurală antică de la Telița – Amza, jud. Tulcea." *Peuce New Series* **1**, 155–232, 2003.
- 8 V. H. Baumann, "Raport asupra cercetărilor arheologice efectuate în ferma romană de la Telița, punctul "La Pod" (jud. Tulcea), în anul 1980", *Peuce* **9**, 51–65, 457–72, 1984.