

A geomagnetic survey of *Ammaia*: a contribution to understanding Roman urbanism in Lusitania

Cristina Corsi, Paul S. Johnson and Frank Vermeulen

This paper presents the results of geomagnetic field survey undertaken in three stages (July 2009–October 2010) within the area of the Roman town of *Ammaia* (Marvão, Alto Alentejo, Portugal), some 120 km northwest of Mérida (fig. 1). The principal goal was to map the full extent of sub-surface archaeological features within the archaeological park owned by the Fundação Cidade de Ammaia and those neighbouring properties which can be argued to fall within the walls (fig. 2). The integration of the data collected through several survey techniques tested at *Ammaia* is still ongoing. Topographical and three-dimensional geophysical data from ground-penetrating radar and earth-resistivity survey will soon permit more detailed spatial, volumetric and diachronic interpretations of targeted areas. Other approaches, such as limited excavations and other types of survey (GPR, earth-resistance, DGPS, augerings, artefact surveys, metal-detector surveys, and scanning of standing architecture) (fig. 3), have been presented elsewhere, while a full discussion of the surveys of the forum area is the subject of a recent paper.¹ This article presents the data collected through gradiometer survey² and its initial archaeological interpretation leading to a complete town plan. Based on this data we will assess the urban characteristics of a

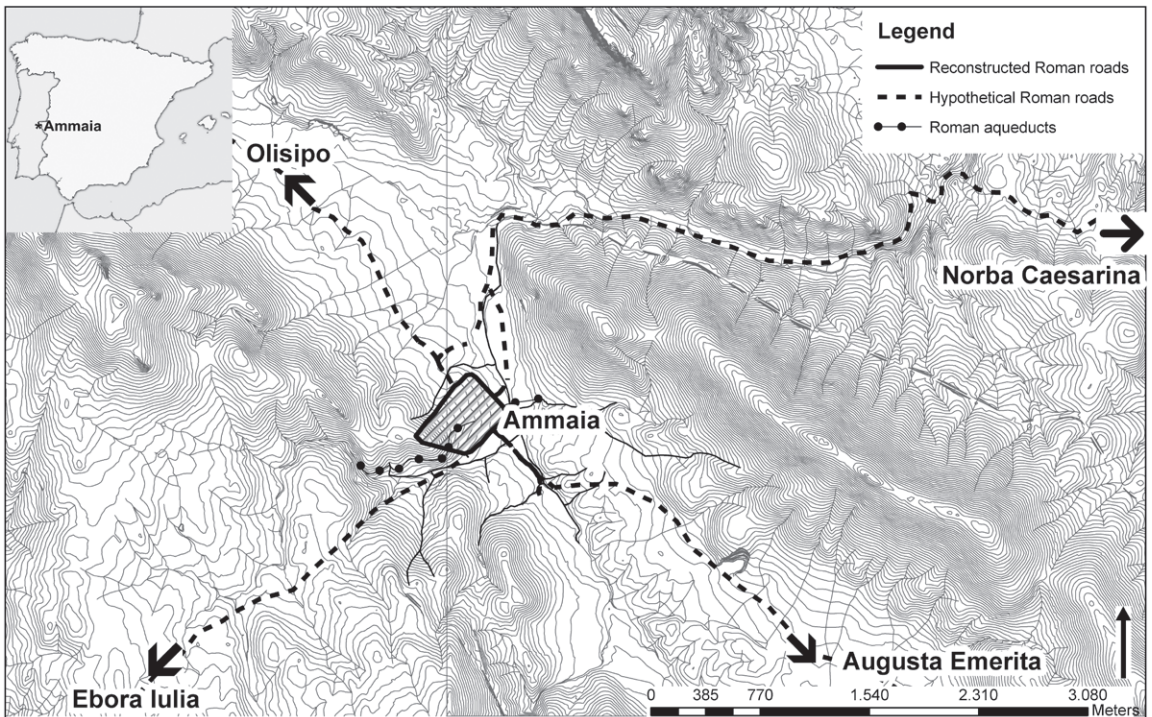


Fig. 1. *Ammaia* and its territory. Inset: location of the town in the Iberian peninsula (C. Corsi).

1 Vermeulen, Corsi and De Dapper 2012.

2 The surveys by the University of Évora (CIDEHUS) are directed by C. Corsi and F. Vermeulen while the gradiometer survey, the processing of results and first interpretation of anomalies is the work of P. S. Johnson.