

# The Impact of Roman Expansion on the Pontine Marshes

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## Abstract

In this paper we reflect on the theme of changing city-hinterland relations on the basis of recent research carried out within the long-running Pontine Region Project. We discuss new evidence on the impact of Rome's expansion on a specific part of the Pontine region, the so-called Pontine Marshes, an inhospitable area that was rendered suitable for habitation and exploitation through substantial infrastructural works, land reclamations and settlement foundations. We argue that these data show the fundamental yet heterogeneous impact of Roman expansion on town-country-relations.

## Introduction

The Pontine Region, situated c. 60 kilometres south of Rome, is a coastal plain bounded by the Tyrrhenian Sea, the Alban Hills and the Lepine Mountains. The coastal plain itself consists of a system of higher marine terraces along the coast and, further inland, a lower lying area generally known as the Pontine Marshes. Written sources attest to the complex history of Roman expansion in the Pontine region, starting already in the late 6<sup>th</sup> century B.C. Colonies were founded in two phases in the late 6<sup>th</sup> / early 5<sup>th</sup> century and in the later 5<sup>th</sup> and early 4<sup>th</sup> century; these colonies were later to become the main urban centres of the region.<sup>1</sup> Slightly later, written sources also mention the foundation of rural tribes, indicating that by the late 4<sup>th</sup> century B.C., parts of the region were incorporated in the *ager Romanus*. Around this time, the *Via Appia* was also constructed, leading straight through the Pontine Marshes to the harbour town of *Tarracina*, and road stations were installed along it to service passing travellers. At the same time the *Decennovium* was dug, a canal that ran from *Forum Appii* parallel to the *Via Appia* towards the Tyrrhenian Sea. This canal formed the main waterway draining the lower pontine plain and must have contributed to the reclamation of the Pontine Marshes.

## The Minor Centres Project

Archaeological fieldwork in the region has been carried out as part of the Pontine Region Project (PRP) since the late 1980s. So far, c. 36 km<sup>2</sup> have been surveyed with intensive systematic methods, mostly in the surroundings of Archaic Latin centres and Roman towns, such as *Norba*, *Setia*, *Antium* and *Satricum* (fig. 1).<sup>2</sup> Within the most recent, fifth phase of the PRP, here referred to as the Minor Centres Project, we focused on the role of what we call minor centres – non-urban nucleated sites – in the regional

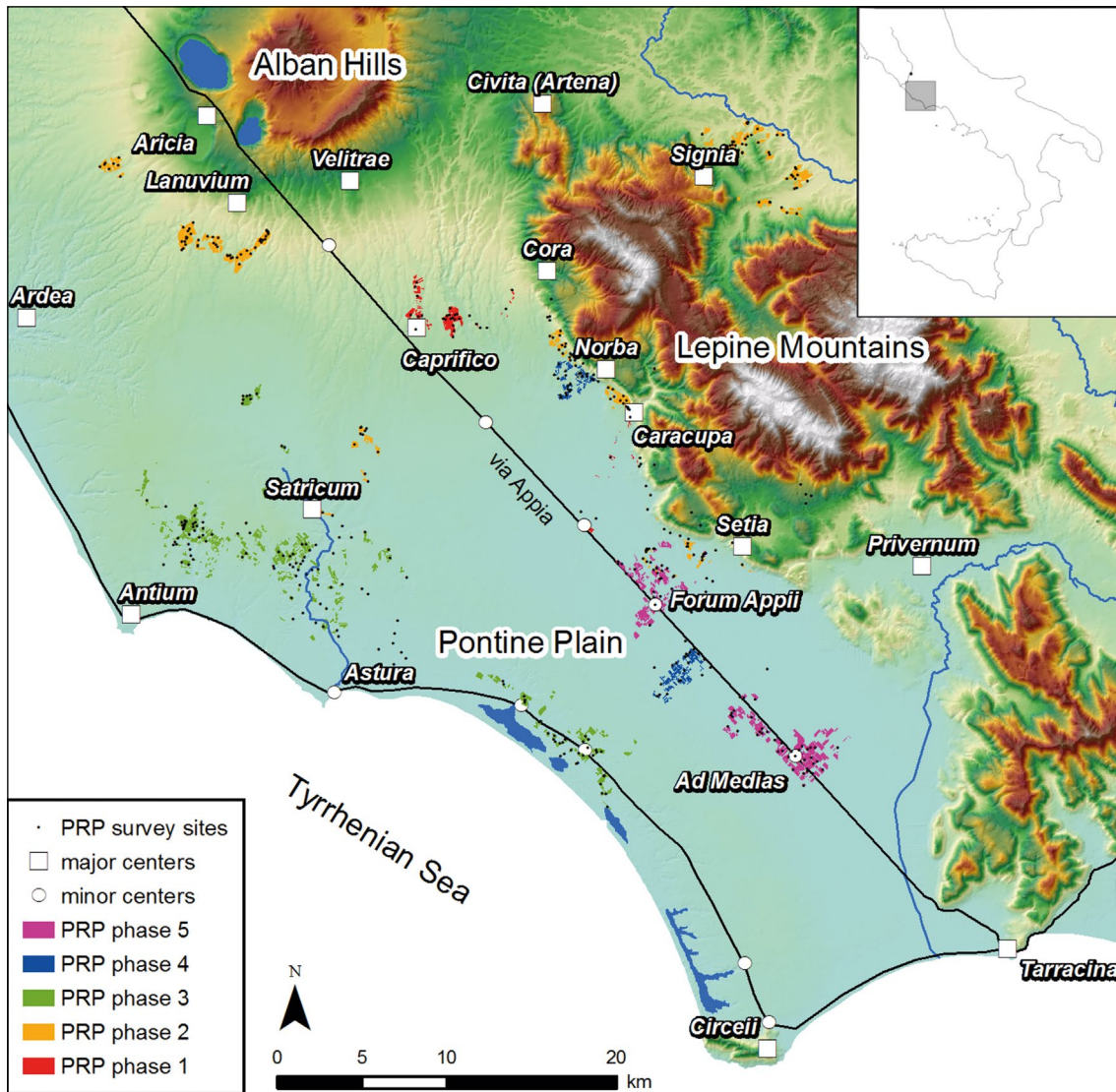


Fig. 1: The Pontine region with PRP survey areas and sites mentioned in the text.

economy. Concretely, we wanted to investigate what central place functions such sites could have, and how they interacted with both larger towns and smaller isolated rural settlements. To this end, we performed new archaeological research on and around the minor centres of *Forum Appii* and *Ad Medias* in the lower Pontine Plain.<sup>3</sup>

In order to reconstruct the functions of *Forum Appii* and *Ad Medias* and patterns of settlement and land use in their surroundings, two non-invasive methods were adopted: First, geophysical prospections were carried out at *Forum Appii* and *Ad Medias* to identify buried structural remains; and second, systematic field walking was carried out both on these two sites and in their rural surroundings. At the two road stations the field walking surveys were carried out in 25 × 25 m grids, systematically collecting artefacts with

the aim of reconstructing the chronological development of these sites and, with the geophysical prospections, their layout and functional zoning. Outside *Forum Appii* and *Ad Medias*, site-oriented field surveys were used to map the chronology and distribution of rural settlements and to elucidate their ties, both spatially and materially, with the minor centres. Both on the minor centres and in their surroundings, we applied highly intensive ceramic collection strategies in order to acquire accurate dating evidence and to analyse the assemblages of these sites in light of functional zonation and patterns of production and consumption.<sup>4</sup>

The results from the field walking confirm that both *Forum Appii* and *Ad Medias* were founded in the late 4<sup>th</sup> century B.C. (roughly contemporaneous with the construction of the *Via Appia*), but developed quite differently over time.

### *Forum Appii*

The black gloss pottery recorded at *Forum Appii* suggests that already during its earliest phase the site occupied a large area. Considering the widespread occurrence of pottery such as terra sigillata and building materials, the site reached its maximum extension during the late Republican and early Imperial period (1<sup>st</sup> century B.C. – 1<sup>st</sup> century AD) when it covered at least 12 ha (fig. 2 A). While there is substantial evidence for continued settlement throughout the Imperial period, the site was probably abandoned in the 6<sup>th</sup> century. The collected materials also point to the presence of several functional zones: finds of human bone on the surface confirm the presence of tombs (corroborating observations made during previous studies) and two large millstones (found out of context) suggest the presence of a bakery. To the north, a separate cluster of misfired fragments of pottery and building ceramics of the second and first-centuries B.C. represent a ceramic workshop. Directly along the *Decennovium* Canal, many slags were found, suggesting on-site metal production.

The results from the field-walking are supplemented by those from the geophysical prospections. At *Forum Appii* structural remains were mapped throughout the settlement area, although the data is often noisy and much of the buildings must have been destroyed by ploughing. To the northwest, four kilns were revealed, flanked by a small square structure and a possible fifth kiln. Also, various anomalies were mapped in and around the ceramic workshop: these may indicate refuse pits that contain the production debris that was encountered on the surface. A larger anomaly is tentatively interpreted as an area for the extraction of clays, and c. 50 m southwest of these pits there is a cluster of three or possibly four kilns. South of the *Via Appia*, a long linear anomaly parallel to the canal is perhaps to be interpreted as the remnants of a road. More to the south, several large structures are recorded close to the canal. One rectangular anomaly measures c. 40 × 5 m and to its north and east, it may be flanked by the remains of a second, similar structure. Approximately 20 m to the southeast there is another large

structure of c. 25 × 20 m. Based on associated surface ceramics, we think both buildings date in the early and mid-Imperial period. Parallels may be found at *Portus*, where they are interpreted as warehouses. These warehouses probably relate to the river harbour that is also mentioned in written sources.<sup>5</sup> To the southeast, finally, the magnetic signal may reflect a small industrial zone, confirming what we surmised from the presence of slag in this area.

The importance of *Forum Appii*'s river port is clearly reflected in the quantities and variability in the imported amphorae we find at the site: the site had access to wine, oil and other foodstuffs from a wide range of production areas. This contrasts starkly with *Ad Medias* and rural sites, where only few types of amphorae are found, and in much smaller quantities. This would suggest that *Forum Appii* functioned as a regional trade hub where goods coming in through the main port of *Tarracina* were redistributed.<sup>6</sup>

### *Ad Medias*

Even though part of it may be overbuilt, *Ad Medias* was much smaller than *Forum Appii*, and the collected materials suggest that *Ad Medias* already declined in the last centuries B.C. and was only sparsely inhabited during the first two centuries AD: black gloss pottery is found in abundance, while later wares such as terra sigillata and African red slip are only sparsely present. Three main scatters were recorded, two of which with a clear productive connotation (fig. 2 B). On the two scatters, situated south of the *Appia*, the presence of slags hints at metal production, whilst one scatter also yielded numerous fragments of perforated plaques belonging to a muffle oven. North of the *Appia*, a scatter of mid- and late Republican ceramics was found. To the north of this scatter fragments of misfired pottery and building ceramics were observed, suggesting the nearby presence of a ceramic workshop.

The geophysical prospections only mapped scant structural evidence. A small rectangular anomaly along the *Via Appia* may represent a burial monument, whereas to the north a two-room structure was revealed. South of the *Via Appia*, two noisy areas correspond to pottery scatters that were recorded during field walking. One of these contains a clear kiln of some 2,5 m in diameter, the presence of which was already suggested by the muffle fragments found during fieldwalking.

Of special interest in light of early Roman expansion are several large north-south and east-west oriented linear anomalies of some 6,5 m wide. Based on the results from corings, we know that these anomalies represent ancient ditches and canals that are part of a much larger land division (or centuriation) scheme, traces of which were previously identified in cartographic sources and on aerial photographs.<sup>7</sup> The system consists of blocks measuring 10 × 10 Roman *actus* (c. 355 × 355 metres) and covers an area of more than 120 km<sup>2</sup>; it could therefore have provided allotments for thousands of colonists. Although we cannot date this system directly, it seems very likely that it pertains to

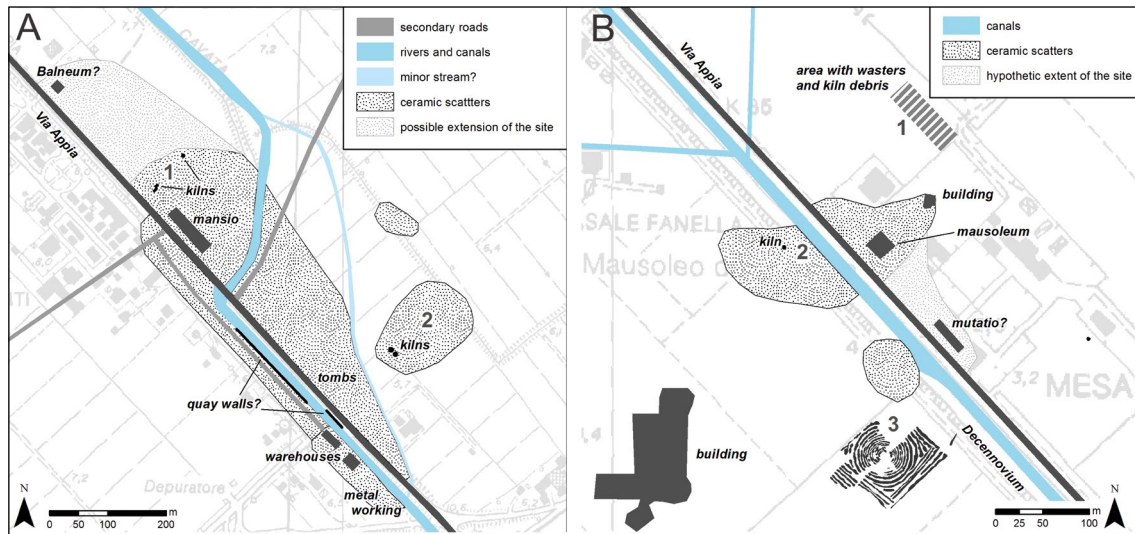


Fig. 2: Reconstructed plan of the sites of *Forum Appii* (A) and *Ad Medias* (B)

roughly the same period as the earlier discussed infrastructural improvements, and the foundation of the sites of *Forum Appii* and *Ad Medias*. Additional evidence for this comes from the rural surveys in the centuriated area around *Forum Appii* and *Ad Medias*.

### Rural Surveys

These rural surveys reveal a landscape dotted with small habitation sites with highly standardised ceramic assemblages, comprising some tile, transport amphorae, utilitarian pottery, loom weights and fragments of black gloss. Particularly revealing is the occurrence of many fragments preserving small circular stamps of the so-called *petites estampilles* tradition, providing firm evidence for their occupation during the final decade of the 4<sup>th</sup> or the early years of the 3<sup>rd</sup> century B.C. This start date is actually confirmed for almost all sites on the basis of black gloss wares, coarse wares and transport amphorae.

Interestingly, around both *Forum Appii* and *Ad Medias*, many of these rural settlements were rather short-lived: Only half of them continued to exist in the 2<sup>nd</sup> and 1<sup>st</sup> centuries B.C., and around *Ad Medias*, continuity into the early Imperial period is restricted to only a handful of sites (fig. 3). Around *Forum Appii*, which as we saw itself flourished in the Imperial period, rural sites more often show continuity into the Imperial period. Also, compared to the sites around *Ad Medias* they are generally larger and some exhibit the use of elaborate architecture. The longer life span of sites in this area may relate on the one hand to the fact that the area is situated somewhat higher, but on the other to the proximity of *Forum Appii* as a centre of production and trade: these larger sites seem to have been involved in commercial wine production.

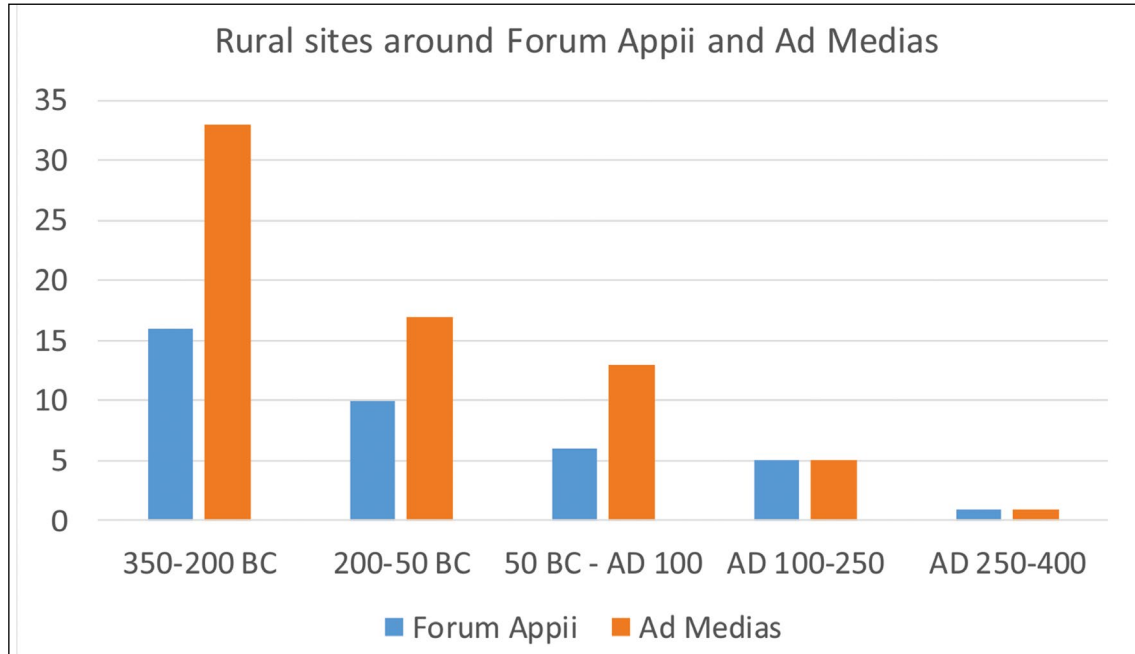


Fig. 3: Rural settlement trends around *Forum Appii* and *Ad Medias*.

So, to summarise the outcomes of our intensive field research in the pontine marsh: it seems clear that both *Forum Appii*, *Ad Medias* as well as the rural sites and associated centuriation were founded in the late fourth century B.C., and were perhaps part of a single phase of colonial expansion and large scale investments to render this area suitable for colonist settlement. But while *Ad Medias* was a small local centre servicing (and declining along with) the farms in its surroundings, *Forum Appii* with its forum and strategic location (especially with its river port), developed into a centre of regional importance, with a clear redistributive role in economic networks.<sup>8</sup>

### Minor Centres and City-Hinterland Relations

To conclude, let us briefly return to the theme of changing city-hinterland relations. In the Pontine region, these relations were clearly fundamentally affected by Roman expansion: the foundation of colonies in the early Republican period had already changed the regional urban landscape, and *Forum Appii* and *Ad Medias* are only two of a series of nucleated settlements newly founded along the *Via Appia* in the mid-Republican period. The main *raison d'être* of these new foundations really seems to have been to service their rural surroundings. But even if these were modest sites not comparable (in size, layout nor functions) to contemporary urban centres, the case of *Forum Appii* clearly shows that such minor centres could become more sustained regional centres not only dependent on their direct surroundings.

A second observation concerns the complexity of such town-country relations, which were not simply about a town servicing its hinterland or the countryside provisioning a single urban market. Rather, much more heterogeneous and overlapping relations existed, involving multiple central settlements of different size and complexity: for obtaining day-to-day goods links with local minor centres would have been important, while for less regular exchanges, perhaps also religious and social gatherings, larger urban centres may have been points of reference for rural populations. And finally, we should not lose sight of the more distant but certainly no less important socio-political links to Rome itself – after all, the centuriated marsh was part of the *ager Romanus* and hence the colonist farmers in this area were from the start Roman citizens, and may also have produced for the Roman urban market.

On a methodological level, the kind of integrated field approach we have adopted here, combining various archaeological methods, seems to be a highly productive way of uncovering these complex and changing relational networks between central settlements and rural areas.

### Notes

<sup>1</sup> On the early colonization of the region: De Haas 2011; Attema et al. 2014; De Haas 2017a.

<sup>2</sup> For an overview: De Haas – Tol forthcoming.

<sup>3</sup> For preliminary publications of the data: Tol et al. 2014; De Haas et al. 2017; Tol – de Haas 2016. The final publication of the project is currently in preparation by the authors. The project data have been archived at: <<https://easy.dans.knaw.nl/ui/datasets/id/easy-dataset:67156>> (11.08.2019).

<sup>4</sup> Tol – Borgers 2016; Borgers et al. 2017; Borgers et al. 2018.

<sup>5</sup> Hor. Sat. 1, 5.

<sup>6</sup> Tol et al. 2014; Tol 2017.

<sup>7</sup> For the coring: De Haas 2017b. On the centuriation: Cancellieri 1990; De Haas 2011.

<sup>8</sup> For Ad Medias: cf. Coarelli 2005; for Forum Appii: Bruckner 1995.

### Image Credits

Fig. 1–3: by the first author.

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