## Introduction

Interest in the Civita of Tarquinia dates to the Renaissance,<sup>1</sup> but it was only in the 19th century that topographic studies and the first archaeological investigations intensified, which, in some cases, constitute the only sources of knowledge about the site. However, it was the systematic excavations, initiated in the first half of the 20th century and continuing with the important research conducted by the University of Milan, that laid important foundations for understanding the settlement dynamics of the plateau.<sup>2</sup> In addition to these studies, we will present the data from recent investigations conducted on the plateau by the University of Verona, which provide an original contribution to the knowledge and reconstruction of the city's topography.

Research activities on the plateau of the city of Tarquinia,<sup>3</sup> conducted of the University of Verona under the scientific direction of Professor Attilio Mastrocinque, began in 2016.

These archaeological activities took place thanks to the initiative of Alfonsina Russo, who was the superintendent at the time. She proposed continuing the excavations carried out by the Soprintendenza in of the so-called "domus del mitreo."

In 2016, preparatory to the first excavation campaign, an initial geophysical survey was conducted immediately to the west of the excavation area of the so-called "domus of the mithraeum," with a Geoscan F256 type gradiometer, for an extension of 50 x 50 m. The results, which highlighted some quadrangular rooms of the building, suggested to continue the research to the west of the excavation, but due to the challenging ground conditions of the Civita, geophysical surveys with this type of magnetometer and traditional georadar scanning was hardly feasible. The presence of stone blocks, pebbles, and various plants, protected by regional laws prohibiting their removal, hindered the use of such instruments for regular soil measurements.

These reasons, the portable magnetometer (GEM Systems GSM 19GV) proved to be the most effective instrument. Its small size allowed researchers to maneuver among plants

and stones while continuously collecting measurements, aided by GPS for mapping purposes.

The first promising results suggested expanding the research to the rest of the Civita plateau in order to extend the investigations into the uninvest gated areas and, at the same time, supplement the data from previous magnetometer surveys.<sup>5</sup>

Since 2017 to 2022, a team of the University of Verona directed by A. Mastrocinque and assisted by Fiammetta Soriano, has conducted six geophysical survey campaigns on the "Civita di Tarquinia," covering a total area of approximately 104 hectares (fig. I.1). Due to the challenging soil conditions, measurements were carried out only in accessible areas, navigating around thorny plants, stone blocks, and other obstacles.

The subsoil of the Civita is predominantly composed of a bedrock rich in porous calcium carbonate and calcareous sandstone ("calcarenite"). However, in certain areas, such as the zone of the "domus del mitreo," clay is present. Wells and cisterns on the Civita were carved into the rock or clay, with inner argillaceous walls coated with stones. The varied composition of the bedrock poses an additional challenge in interpreting geomagnetic measurements. It has not been easy to identify underground structures such as tunnels or all water reserves. Such an investigation should be conducted using an instrument like a gravimeter. The important publication by Gianluca Padovan<sup>6</sup> on cisterns, wells, and tunnels of Tarquinia does not allow for the exact positioning of each described structure.

The magnetic survey likely reveals the situation during the late Roman Empire, with some additions from the Middle Ages when the Civita was owned by a noble family residing in the Castellina. This noble family controlled a small village near the hill, at least from the 13th century to 1407 AD. There have also been minor alterations resulting from agricultural activities over the past centuries, particularly with the use of tractors after World War II. Therefore, it is presumed that the survey primarily captures features of ancient Tarquinia, including the structures of the pre-Roman phase. The territory experienced partial abandonment and agricultural use, with few medieval and modern houses. The modern boundaries of field parcels can be easily identified both on the ground and in the geomagnetic survey. All of this suggests that the urban plans and the recurring orientations of streets and blocks are rooted in ancient conceptions of the city, both in the pre-Roman and Roman periods.

<sup>&</sup>lt;sup>1</sup> The representation of the Civita plateau created by A. da Sangallo the Younger dates from the early 16th century.

<sup>&</sup>lt;sup>2</sup> The research conducted at various times on the Civita plateau was mostly focused on understanding settlement dynamics during the Etruscan period.

<sup>&</sup>lt;sup>3</sup> This latter is the name of the ancient town and the modern Tarquinia corresponds to the medieval Corneto.

<sup>&</sup>lt;sup>4</sup> Scapaticci 2018, 9–23. Since the archaeological excavation in the "domus del mitreo" at Tarquinia (this is a conventional name depending on the discovery of a statue of Mithras in this area) has been prevented from going on by bureaucratic and political reasons, we decided to continue in 2019 with only non-invasive surveys. On the archaeological research in this domus: Mastrocinque, Soriano, Marchetti 2020.

<sup>&</sup>lt;sup>5</sup> See paragraph 3.1.

<sup>&</sup>lt;sup>6</sup> Padovan 2002.

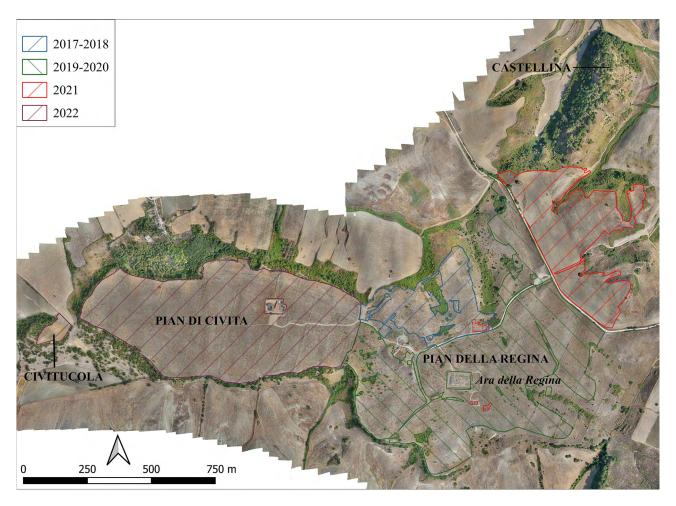


Figure I.1. Orthophoto of the Civita di Tarquinia and the zones of different surveys (F. Soriano).

Tarquinia was never conquered by the Romans during a war, but received a treaty<sup>7</sup> from the Romans around 280 BC, following the triumph de Etrusceis in 281.8 In fact, in 211 BC, Tarquinia had the right to host exiles9 and therefore was an independent city. 10 As a civitas foederata (and later a municipium), Tarquinia could not be treated by the Romans as a subject and there was no reason to radically change its urban plan.

A part of its territory had been confiscated and, as a result, the colony of Gravisca was founded, Statonia became a praefectura,11 and the Gracchi sent some colonists to the former Tarquinian territory.12

We also note the absence of several prominent features commonly found in many ancient towns, such as an amphitheater, a theater, a circus, and an aqueduct. Instead of an aqueduct, the citizens of Tarquinia relied on their ancient system of wells. While no visible trace of a theater is apparent, we cannot definitively conclude its absence.

recognized and interpreted as the city's main road system (figs. 1.6, 1.10 in chapter 1 and fig. 3.3 in chapter 3). The identification of these roads made it possible to confirm

However, the absence of an amphitheater is a more

significant indication that it may not have existed. On the

other hand, evidence suggests the presence of a circus,

supported by numerous funerary paintings in Tarquinian

tombs, and an Etruscan carnelian scarab from the "domus

del mitreo" depicting a triga, a three-horse chariot (fig. I.2).

From the reading of the geomagnetic maps, combined with the study of previous research, linear anomalies were

Figure I.2. Carnelian Etruscan scarab from the "domus del mitreo" (A. Mastrocinque).

<sup>&</sup>lt;sup>7</sup> AE 1951, 191: Tarquinienses foeder[ati].

Inscr. It. XIII.1, 1b.

Liv. XXVI.3.11.

<sup>&</sup>lt;sup>10</sup> Beloch 1926, 456; Veyne 1960, 429–436, part. 431.

<sup>11</sup> Stanco 1994, 247-258; Munzi 1995, 285-299.

<sup>&</sup>lt;sup>12</sup> Torelli 2012, 343–385.













Figure I.3. Team that participated in the measurement activities using the magnetometer (photos of the authors).

and, in some cases, to define more precisely the presence and position of gates and posterns accessing the town (fig. 3.3), in particular the gates to the northeast and southeast of the plateau (figs. 3.3, 3.12, 3.16 in chapter 3).

In addition, areas with streets and buildings with different orientations were identified within the urban layout (fig. 2.1 in chapter 2), which led to the definition of six zones (fig. 3.10 in chapter 3). Within the zones, areas with specific urban characteristics were recognized, which are referred to here as city neighborhoods (fig. 4.1 in chapter 4).

Finally, within the quarters, many urban blocks were identified, occupied by both private and public buildings such as houses, baths, porticoes, fountains, warehouses and a *macellum* (figs. 4.22, 4.23 in chapter 4).

One of the most interesting discoveries was recorded south of the large temple known as the "Ara della Regina," a large building interpreted as the Roman forum of the city and confirmed by recent archaeological excavations (figs. 4.36, 4.41 in chapter 4).

The geophysical research was conducted in tandem with the archaeological excavations. Numerous doctoral students, researchers and students actively participated in the measurement activities using the magnetometer. In particular, we would like to mention: Luca Arioli, Nicola Balbo, Angelica Gabrielli, Nicola Luciani, Andrea Zemignani, Damiano Berlato, Nicola Delbarba, Anna Nicolussi, Marisa Tengattini, as well as the authors of this book (fig. I.3).

We would like to thank the superintendents and the archaeological officials<sup>13</sup> responsible for the area for their support of the University of Verona team: Alfonsina Russo, Margherita Eichberg, Gabriella Scapaticci, Flavia Trucco, Daniele Maras and Rossella Zaccagnini.

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