

## A proposal for the study of coastal Roman Late Republican sites on Menorca (Balearic Islands) from the case of Mongofre Nou

*Una propuesta para el estudio de yacimientos costeros de época tardorrepública en Menorca (Islas Baleares) a partir del caso de Mongofre Nou*

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**Resumen:** El presente trabajo expone una propuesta para el estudio de los yacimientos costeros de época tardorrepública en la isla de Menorca (Islas Baleares), con el objeto de estudiar y comprobar la hipótesis que sostienen los autores sobre la existencia de una serie de puestos de

vigilancia de la costa por parte del ejército romano durante y después de la conquista de las Baleares (123 – 121 a.C.). Este proyecto en curso y de largo recorrido, cuyas características principales se describen en las siguientes páginas, ha incluido, hasta la fecha, la prospección sistemática y excavación de un yacimiento arqueológico localizado sobre un promontorio costero al noreste de la isla (Mongofre Nou, Maó), los resultados del cual se presentan aquí.

**Palabras clave:** época tardorrepública, Menorca, yacimientos costeros, prospección, excavación.

**Abstract:** This paper presents a proposal for the study of coastal sites dating back to the Roman Late Republican period on the island of Menorca (Balearic Island), with the aim of studying and validating the hypothesis held by the authors of the possible existence of a set of small lookouts for the control of the coast by the Roman army during and right after the conquest of the Balearic Islands (123 – 121 BC). This long-term ongoing project, whose main characteristics and actions will be presented in the following pages, has already included the systematic survey and excavation of a first site on top of a coastal headland in the northeast coast of the island (Mongofre Nou, Maó), the data of which will be also presented here.

**Keywords:** Late Republican period, Menorca, coastal sites, survey, excavation.

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## 1. CONTEXTUALIZATION: CONQUEST AND ROMANISATION OF MENORCA IN THE LATE REPUBLICAN PERIOD (2<sup>ND</sup> AND 1<sup>ST</sup> CENTURIES BC).

The Balearic Islands of Mallorca and Menorca were conquered by the Romans between 123 and 121 BC (Strabo, III, 5, 2)<sup>1</sup>, an event after which they were included in the province of Hispania Citerior and which has traditionally marked the end of the Prehistory (known as the Talayotic period<sup>2</sup>) in both islands. This conquest took place in the context of the Late Republican period, which was characterised by a profound crisis of the political system, which was held by few families, the attempts of social and farming reforms formulated by the Graco brothers in detriment to the *optimates*, and an imperial dynamics of Rome in the West Mediterranean (Puig, 2014: 147) to complete the control of this part of the *Mare Nostrum*, especially after destroying Carthage in the 3rd Punic War (146 BC) and reaching the victory at Numantia (133 BC) in the Iberian Peninsula.

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<sup>1</sup> All references from classical authors that appear in this paper are included in a work dealing with all classical references to the island of Menorca, which has been used for this study (Blanes *et al.*, 1990).

<sup>2</sup> The Talayotic period covers roughly 1,000 years, between 1,200 BC and the Roman conquest (123 BC). It is characterised by the flourishing of a distinctive native prehistoric society (known as the Talayotic culture) with some shared traits between the two islands, although there are important differences between them. The period is subdivided into the Early (1200 – 500 BC) and the Late (500 – 123 BC) Talayotic periods (Anglada *et al.* 2017).

This military campaign in the *Insulae Baliares*<sup>3</sup> was led by general Quintus Caecilius Metellus in the year of his consulship. Metellus returned to Rome two years later, where he was received to celebrate his triumph, after which he was given the nickname “Balearicus”. Unfortunately, many details of this campaign are not known, and both literary sources and Archaeology are of great importance in order to have a better understanding of the events that took place between 123 and 121 BC and the decades after. However, regarding the written evidence, the work that would have provided significant information about this conquest, book LX of *Ad Urbe Condita* by Titus Livy, has not come down to us, and we only count with general references written by later authors, some of whom followed the work of Livy, such as Florus and Orosius, as well as Strabo, who possibly followed Posidonius (Puig, 2014).

All these references point to the piracy that abounded around the Balearics as the main reason why the Senate of Rome promoted this conquest (Prieto, 1987). The provenance of the pirates who threatened ships in this part of the Mediterranean is not known, being either the inhabitants of the Balearics themselves, according to Florus (I, 43) and Orosius (V, 13, 1), or other groups according to Strabo (III, 5, 2). However, it seems this would have just been a pretext to initiate the conquest, being the factors that motivated this action related to the interests of Rome, including the fact that the Balearics were the only territory in the West which had not been under Roman rule yet, and their strategic location made this archipelago a very important scale in the maritime crossroads of trade networks between the Iberian and the Italian peninsulas. In this way, having both military and commercial bases on the islands would have been beneficial for the safety of ships (Orfila et al., 2008: 46). And, in the end, this annexation would perfectly adjust to the expansionist policies of the Republic, after the conquests of Sardinia (126-122 BC) and Transalpine Gaul (125-120 BC) (Orfila et al., 2008: 45). The importance of the maritime routes as being the main factor for the conquest is attested by the fact that the Roman towns founded in the Balearics were all located on the coast, such as those mentioned by Pliny the Elder: Palma, Pollentia and Bocchor in Mallorca, and Iamo, Mago and Sanisera in Menorca (HN, 3.5.76-78).

After the conquest by Metellus, the Balearics lost their independence for the first time, even though it did not imply that a total break from the previous period came to pass, as is attested in a large number of indigenous (Talayotic) settlements, whose occupation continued for several centuries after 121 BC (García-Argüelles et al., 1994; Nicolás, 2003: 115; Bravo, 2017). Moreover, the

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<sup>3</sup> Mallorca and Menorca. Ibiza and Formentera (*insulae Pityusae*) were not included in this campaign, possibly due to the status of the city of Ebusus (in Ibiza) as federate of Rome (Zucca, 1998: 91-92).

islands would have started to experience the gradual process of Romanisation with the arrival of colonists; the maintenance of military settlements for the control of the territory and the coast, which were those built during the conquest such as Ses Salines in Mallorca (García Riaza, 2002: 513) and that represented the first Roman settlements on the islands (García Riaza, 2003: 77)<sup>4</sup>; the founding of towns; the legal regularisation of the indigenous population (Riera, 2003: 136) and the arrival of Italic products which, even though they were already arriving to the islands before the conquest through a commerce controlled by Punic Ibiza<sup>5</sup>, they now did it through a commerce controlled by Rome itself.

Despite the scarce literary references and archaeological evidence and the consequent lack of information, in Menorca it is feasible to think about a network of military installations in coastal headlands to control the coast and the most important geographical features nearby, including the natural ports of nowadays Ciutadella, Maó, where a Late Republican fortified settlement or *castellum* was documented (Sánchez León, 2003: 106), which was prior to the development of the city, and Sanitja, where the three Plinian *civitates* of Iamo, Mago and Sanisera were located. In addition to these locations, perhaps other strategic places from where a good visibility of the coast could be obtained (near beaches or coves suitable for the anchorage of vessels and, consequently, the arrival of products to supply the soldiers) were temporarily occupied to control the maritime traffic around the coast of the island and the arrival of ships. Moreover, it is logical to consider that a set of military installations, camps or smaller posts, would remain active in order to watch the coast and control the new territory and its inhabitants for several decades until the administration and the political stability of the island were consolidated. Balearic military camps and forts would have been active several decades after the conquest for this reason. Also, between 123 BC and the middle of the 1st century BC a series of military conflicts occurred in the West Mediterranean, such as the Jugurthine War (Sallust, 105, 1-2), the Sertorian Wars (Plutarch, VII, 1), the conquest of Gaul by Caesar (Caesar, II, 7, 1) and the civil wars between Caesar and Pompey the Great (Cassius Dio, XXIX-XXX), where the active role of Balearic slingers from Mallorca and Menorca is attested in all of them. Thus, recruiting and training slingers would have been another reason to maintain military units in both islands, from where they were sent to battle in different locations in the Mediterranean. In fact, the only military camp documented so far on the island, Sanitja, was active during the time of the

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<sup>4</sup> According to this author, a network of small garrisons would have been distributed along the coasts of Mallorca and Menorca.

<sup>5</sup> In the paper, the ancient placename Ebusus will appear most of the times in order to refer to Ibiza or materials produced in that island.

Sertorian Wars and the war between Caesar and Pompey the Great, being abandoned, according to its excavators, after the latter conflict around 45 BC (Contreras et al., 2006: 240).

Besides the pottery evidence which is contemporary to these military episodes, two lead slingshot bullets with the inscriptions [S CAE] and [S.S. (C?)], probably referring to Quintus Caecilius Metellus Pius (Contreras et al., 2006: 242; Nicolás, 1983: 248) the general who sided with Sulla and fought against Sertorius in Hispania, were located in this camp. It is approximately in this period when several restructurings were undertaken in some of the rooms of the military camp at Sanitja, all this suggesting the importance and involvement of this site during the conflict. The same excavators suggest that the last phase of this military camp took place between 75 BC and 45 BC, when, as attested by the material culture in the stratigraphical evidence, more restructurings were carried out (Contreras et al., 2006: 245). In this period, this garrison could have been loyal to Gnaeus Pompeius, Pompey's son, who went to the Balearics (Cassius Dio, XXIX, XXX) to recruit an army to lead an expedition in the south of the Iberian Peninsula, which was under Caesar's power. It is suggested that in this phase the camp at Sanitja could have had an involvement in this episode, which finished in 45 BC when Gnaeus Pompeius was defeated by Caesar's army at Munda (Amela, 2000). As has already been mentioned, roughly in 45 BC this camp was abandoned and never used again.

With this information one can have a general idea of the situation in Menorca upon the arrival of the Roman rule, with the setting of military settlements in strategic spots, some of them active for many decades after the conquest, the founding of new towns and the continuity in the occupation of a large number of Talayotic settlements.

## **2. MATERIALS AND METHODS FOR THE STUDY OF LATE REPUBLICAN COASTAL SITES**

With all the available information in mind about the conquest of the Balearics, and Menorca in particular, especially the existence of the military camp at Sanitja, which is so far the only one that has been documented on the island (Contreras et al., 2006), but also the lack of data regarding numerous aspects of the Roman world in this territory, being the conquest and the last decades of the Republican period some of them, the authors of this paper decided to start a project to shed light on the arrival of the Roman world to Menorca. The main aim of this project is that of assessing the existence of sites located along the coast with a military or a strategic function, not only proper camps as the one at Sanitja, but also smaller installations for the control of the coast, especially in headlands from where a good visibility of both the coast and

inland could be obtained, next to coves, natural ports or beaches where the anchorage of vessels for supplying soldiers would be feasible. This hypothesis, which has already been suggested by some scholars (García Riaza and Sánchez, 2000: 55; García Riaza, 2002, 2003: 77; Orfila et al., 2008: 49) will be validated or dismissed depending on the results of this project.

At this stage, it is worthy of mention that other cultures in more recent periods have been interested in controlling the coast of Menorca, such as the British, who ruled the island during most of the 18<sup>th</sup> century AD. In the last period of British rule in Menorca (1786 – 1805), they built a set of Martello towers along the coast of the island to watch and protect it (Fernández de la Fuente, 2012). These towers could be easily reached by soldiers on horseback and show a way to effectively control the coast of the island in a different period.

In order to assess a military and a strategic activity on the coast during the Roman conquest and the decades that followed it, the research team aims at carrying out visual inspections along the coast of Menorca. If a visual inspection of a certain spot provides positive results, meaning the location of materials on the surface, the characteristics of those materials are annotated and photographs are taken to analyse their general chronology. If those artefacts turn out to have a Late Republican chronology, the sites are then plotted on a map of the island and inventoried as sites of interest which date back to the Late Republican period (2<sup>nd</sup> and 1<sup>st</sup> centuries BC).

The next step is to consider the possibility of carrying out a systematic survey to better analyse the sites in terms of their extension and main characteristics, the study of them allowing us to better classify the artefacts located on the surface and the presence or absence of visible structures. Regarding artefacts, those are collected during these systematic surveys to be analysed in the laboratory, what allows for a more accurate definition of their chronologies and typologies.

Once the survey and the analyses of a site and the materials are done, if the results of those offer consistent indications or are considered to be significant, an excavation is carried out at the said site, with the main aim of fully understanding the site and recording all the evidence that can shed light on its chronology and function.

Up to this date, unsystematic visual inspections have been carried out in several areas along the coast: three coastal headlands (sa Mesquida, Arenal d'en Castell, Mongofre Nou) in the northeast of the island, a site near the cliffs of Cala Morell in the northwest, and a coastal site on a beach (Trebalúger) in the South. Of all these sites, a systematic survey and an excavation have been conducted in one of them (Mongofre Nou), whose main characteristics and results will be explained in the following paragraphs. The selection of this site

for the development of a scientific research project was due to its potential since a huge quantity of pottery fragments were scattered on the surface, and stones from possible structural remains were located there as well. Moreover, being located in a place that has a current human frequentation in summer was a decisive factor for the team to work in this site, before a further degradation and/or loss of materials could continue taking place.

### **3. MONGOFRE NOU (MAÓ): LOCATION AND DESCRIPTION OF THE SITE**

The site is located next to the beach named Mongofre or Sivinar, which belongs to s'Albufera des Grau Natural Park, and is located in the private property of Mongofre Nou, in the northeast of the island.

Mongofre or Sivinar beach is delimited by two coastal headlands that give the beach a somewhat semi-circular morphology: to the East there is the Punta de ses Llungües, which is a small rock projection that separates the beach from another one named s'Arenalet, whereas to the West there is the Cap Gros, which is a promontory whose most projecting point is called s'Enclusa. Cap Gros is a larger and higher promontory on top of which there is a rather flat surface which gradually increases its height to its northern end, which overlooks the open sea and reaches 52 metres above sea level. The rock walls of this headland which face the Mongofre beach are home to a prehistoric funerary cave known as Cova des Morts, which forms part of two natural cavities that were excavated in the nineties of the 20th century (Bergadà and Nicolás, 2005), locating inhumations dating back to the Pretalayotic period (Bronze Age).

In contrast to this early date for this cave, the archaeological site located on top of the Cap Gros headland of Mongofre Nou dates back to the Late Republican period (2<sup>nd</sup> – 1<sup>st</sup> centuries BC). Its UTM coordinates are 4428675, 603940. A visual inspection of the site by the team members permitted the identification of a large quantity of pottery fragments on the surface which, at least initially, did not expand beyond an area covering fifteen metres in diameter, inside of which not only fragments of pottery could be observed, but also a large quantity of stones, some of them presumably forming part of structures. The pottery sherds were mainly amphora fragments, most of them being of Punic-Ebusitan (amphorae produced in Punic Ibiza) and South Italic (black sand fabric) origins. Moreover, a notable quantity of non-diagnostic sherds from Tarraconenses amphorae from the Layetanian zone (current coast of Barcelona province in the East of the Iberian Peninsula) were also observed. And, in lesser quantities, common and fine wares were also spotted, including some sherds of Campanian type B wares and some eroded indeterminate common wares.

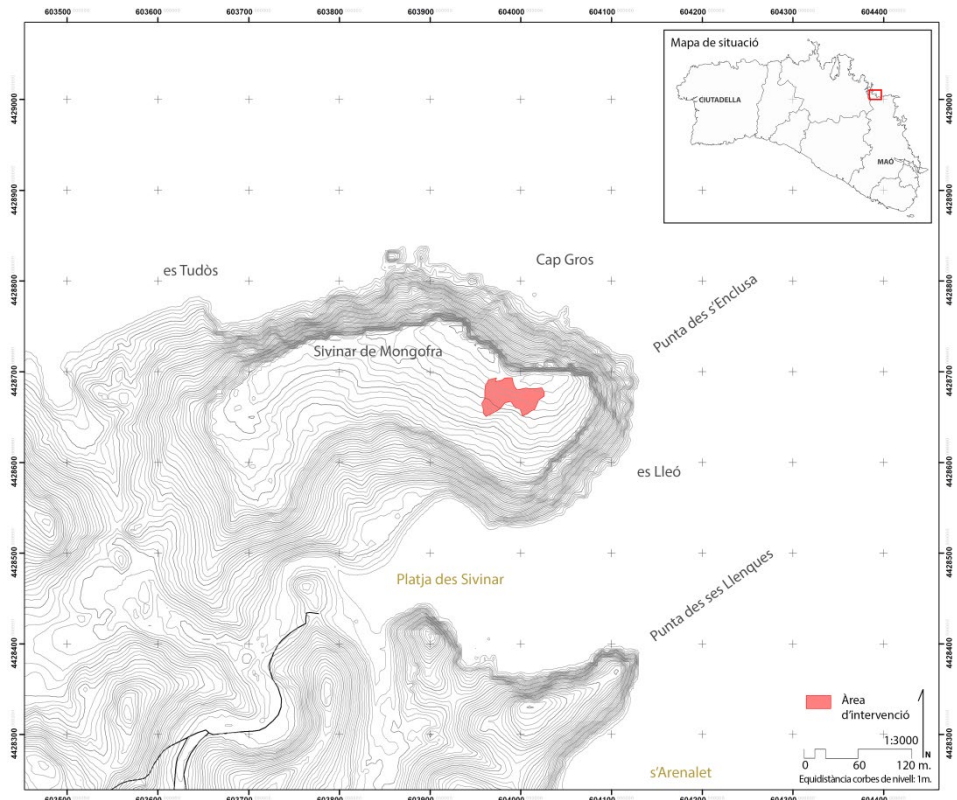


Fig. 1: Location of the site on top of the Cap Gros headland, at the northwestern side of Mongofre beach.

The results of the visual inspection led to the formulation of the hypothesis that this small site could have had a military or a strategic function in the Late Republican period due to several reasons, including the large quantity of Late Republican materials which date back to the period of the conquest of the island, most of them being Campanian amphorae from the South of Italy, Punic amphorae from Ibiza and also amphorae from the Catalan coast. These, along with the Campanian table wares and the absence, at least in the visual inspection, of Samian (*terra sigillata*) table wares suggested a general chronology of the site between the 2nd century BC and mid-1st century BC. Another reason that suggests the existence of a sort of military installation on top of the Cap Gros promontory is its location on a high position from where the entrance of vessels to the Mongofre beach and the beach to its left (Cala'n Brut) could be controlled, but also other nearby points from the area including Addaia port, and also the possibility of spotting further away locations including Mola de Fornells and Cavalleria Cape to the West, two locations that



can be seen from s'Enclusa projection (the highest point of the promontory where the site is located). The dispersion of materials and possible structures on the surface was located some metres away from this projection or highest tip, remaining in a lower position and, thus, somewhat protected from the northern wind known as Tramuntana, which lashes the headland especially in winter months.

Moreover, its proximity to the Addaia-Mongofre salt mine, which is located less than one kilometre away from the site, would have made it a convenient place where to set a lookout, being close to such an important product for Roman soldiers<sup>6</sup>.

#### **4. DEVELOPMENT AND RESULTS OF THE RESEARCH PROJECT IN MONGOFRE NOU**

##### **4.1. Systematic survey**

As has been said in previous paragraphs, the first fieldwork task in the Mongofre Nou headland consisted in a survey in order to delimit the extension of the site. In order to do this, a visual inspection of the entire top of the headland was conducted, so that all possible archaeological materials could be detected, including the furthest away areas from the highest concentrations of ceramics and stones.

These survey tasks did not include the use of remote sensing methods such as LIDAR to avoid biased results that could conditioned the search based on previous criteria. The terrestrial survey and subsequent excavation at the Mongofre Nou site provided enough data that served to characterise the site pattern and the significance of the structures to define site typology. Having this information from the Mongofre site will be of a great value in order to apply remote sensing techniques with a greater efficacy when surveying other potential sites along the coast of Menorca.

However, the use of LIDAR or other related techniques will never replace the traditional terrestrial survey in future interventions in other sites within this project, since relevant features could be missed if only remote sensing was applied.

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<sup>6</sup> In Hispania there is a Late Republican military fort in Penyal d'Ifac (Calpe, Alicante), which is located on a coastal headland in proximity to a salt mine, which would have been exploited by the soldiers staying in the said fort (Sala et al., 2014: 83).

In our survey, the limits given by the distribution of materials were registered with a differential GPS, and each vertex was given an alphanumeric code for identification. All data collected by the GPS was downloaded into the QGis software and the total surface of the site was divided into 24 squares measuring 10 m<sup>2</sup> each, which were plotted on site with the use of the differential GPS (Leica Viva GS08plus). All geographical coordinates were recorded in the UTM zone 31N with the datum WSG84, and were later on converted to datum ETRS89.

The central point of each square from this grid was indicated on site with the positioning of a fifty-centimetre-long wooden peg with its top painted in a fluorescent colour and the corresponding alphanumeric code.

Once the site was arranged into the grid system of 24 squares, the collection of the archaeological artefacts on the surface was carried out by three surveyors who systematically inspected each square from 1 to 24, so that no single pottery sherd was left on the surface. This field-walking was conducted by surrounding each peg three times, one by each surveyor, and materials were placed inside bags that were identified with the number of the surveyed square.

The study of these materials shed light on the most abundant typologies of pottery that were found on the surface, as well as the areas within the site that presented the highest concentration of them. These coincided with those squares where the largest number of stones, some of them possibly forming part of structures, were located.

As for the first, the most abundant typologies of pottery were all from amphora fragments, as detected at the start of the project, and those included Punic amphorae from Ibiza, amphorae from Southern Italy (black sand fabric), Graeco-Italic amphorae of various fabrics and Tarraconenses amphorae from the Layetanian region of the northeast coast of the Iberian Peninsula. Moreover, some Campanian B table ware sherds and common wares, including those of Italian and Ibizan origins, were located.

The square that presented the highest concentration of materials on surface was number 8 with a total of 514 pottery fragments that weighed 15.60 kg. This is followed by square number 13, which presented 157 pottery fragments that weighed 7.70 kg, approximately half of the density of square number 8.

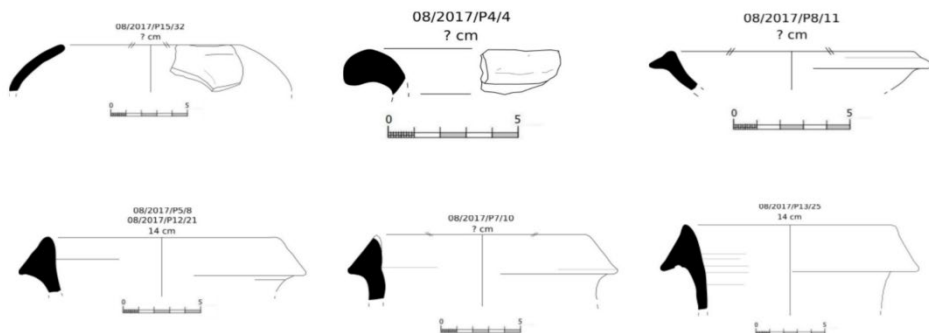


Fig. 2: Some materials recovered during survey. Upper row: Pretalayotic cooking pot, Talayotic cooking pot and Roman common-ware bowl. Lower row: Gaeco-Italic amphorae: LWE (175 – 100 BC) and Dressel 1A (135 – 25 BC).

The squares with a small quantity of materials were located at the edges of the surveyed area, marking the limits of the site. It is worth mentioning that in one of these squares, number 19, no single fragment was located and remains of possible structures were absent too.

Other squares (numbers 1, 6, 18, 22 and 23) presented small clusters of materials consisting of one to twelve sherds. The only fragment recovered on the surface of square number 18 was an amphora sherd that weighs 420 gr., what makes this square being shown in light green color in Figure 3, instead of being painted in dark green.

Regarding the squares with intermediate colors in Figure 3, squares 4, 7, 9 and 14, which surround square 8, present a relatively high concentration of materials that could be the result of post-depositional processes.

An interesting fact is that squares 13 and 14 are those where most of the Pretalayotic pottery sherds were found, with a total number of 27 fragments. Outside these squares, 20 more Pretalayotic fragments were recovered, although they were scattered throughout the area and not forming part of any concentration.

As for the distribution of all these materials, two measurements were calculated for each square: the total number of fragments and the weight of each group of fragments (total number and weight of fragments and number and weight of fragments for each typology), with the aim of ensuring that the number of fragments and their weight were indicating the same patterns. By downloading these data in a computer software for the compilation of distribution maps, both number of fragments and their weight offered very similar information. For this reason, only one map was compiled showing these two parameters for each survey square of the site (Figure 3).

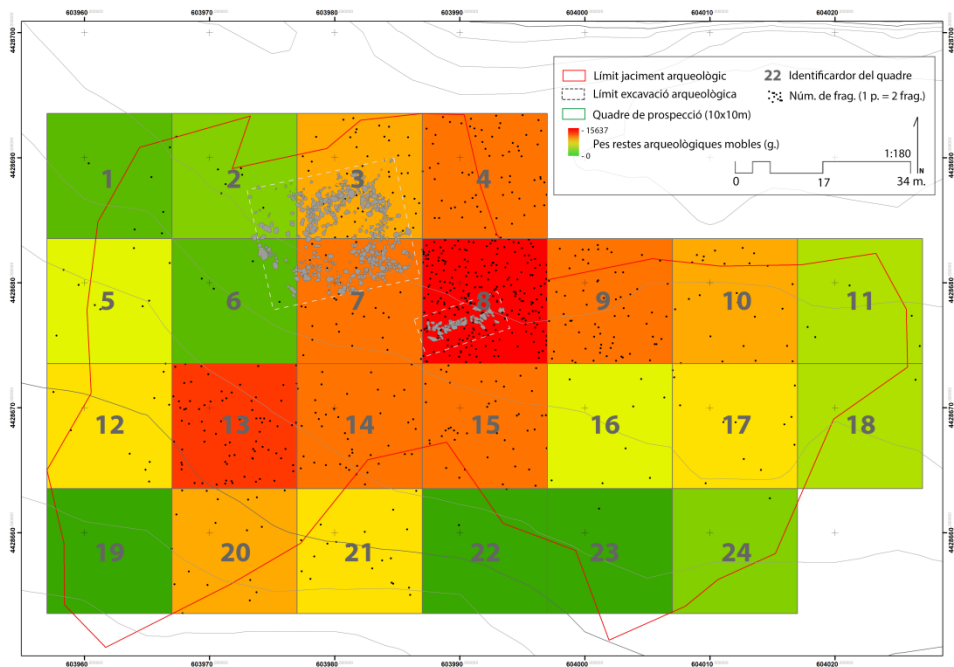


Fig. 3: Map of distribution of pottery fragments recovered during the systematic survey. Red indicates those squares with the highest concentrations, whereas dark green shows the squares with the lowest. In between and in descending order, orange, yellow and light green show the squares with different pottery concentrations.

As for the state of conservation of these materials recovered from the systematic survey, they were generally affected by the fact of being laying on the surface in an area lashed by the northern winds and the effects of the sea salt. Even though in most of the cases their fabrics could be easily seen and

identified and, thus, in the case of amphora fragments of Ibizan or southern Italic origins, those could be determined, very few diagnostic sherds were found in contrast to the many non-diagnostic fragments. Moreover, in the case of those diagnostic fragments presenting rims, many were eroded and their profiles were not complete.

The small quantity of diagnostic fragments on the surface could be due to several causes, and the human action of taking them while visiting the area cannot be ruled out. Even though it is not a place receiving a large quantity of people, in summertime it is frequented by hikers and tourists, who could have taken many of the most representative materials laying on the ground and easy to be spotted. An evidence of this frequentation is the location of modern and contemporary materials during the survey, such as bullets and two cartridges of rifles, tennis balls and a clay smoking-pipe.

Even though the main outlines of the project consider that an excavation is not necessary if a survey provides sufficient data, for this first researched site an excavation was conducted for two main reasons: the location of possible structures that could shed light on the types of edifices or other structures used by the human group occupying the headland, and the need for the location of material evidence from archaeological contexts to better define the chronology of the site, since surface materials cannot provide specific conclusions. Moreover, the already explained frequentation by visitors of various kinds, what could have affected the preservation of all the evidence located on the surface, as is indicated by the lack of a large quantity of diagnostic fragments and the location of modern objects on the surface, was considered to be an important factor in deciding to conduct an excavation, so that more evidence could be obtained and more materials could be recovered before they continued disappearing from their original locations.

Despite all this, the materials located during the survey point to the occupation or use of the headland in three general periods, something that was necessary to confirm and narrow down with the results from the materials located during the subsequent excavation.

The first and oldest period would be represented by the prehistoric materials (both Pretalayotic and Talayotic/ Bronze and Iron Age pottery fragments), offering a general indeterminate chronology situated between 2,200/2,000 and 123 BC. The small representation of these materials and their eroded nature did not allow for a further identification of their chronologies

other than the general inclusion in the Pretalayotic and Talayotic periods. The second and most representative period would be the Roman Late Republican, according to the vast majority of pottery fragments dating mostly between the 2<sup>nd</sup> and the 1<sup>st</sup> centuries BC. Lastly, the third and most recent period would be represented by few objects of a very heterogeneous nature, which point to the frequentation of the area in modern times.

## 4.2. Excavation

By analyzing the results of the systematic survey of the whole site, two zones were selected for archaeological excavation: M1 and M2, which were excavated by following the method based on the stratigraphic sequences (Harris, 1991; Carandini, 1997). The selection criteria of these zones were based on the identification of those groups of survey squares that presented higher concentrations of materials and also possible structural remains.

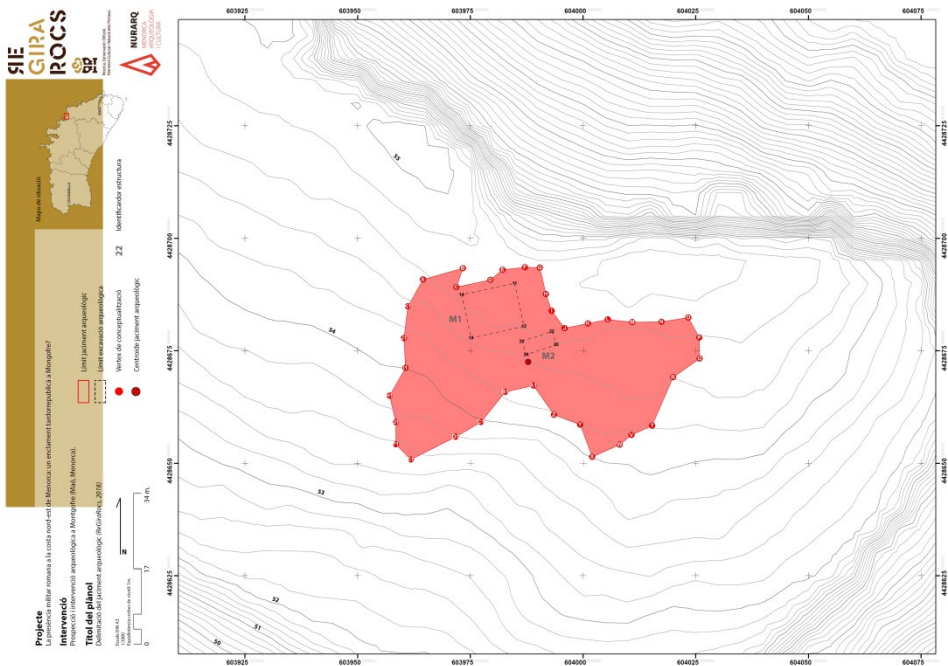


Fig. 4: Location of M1 and M2 within the boundaries of the site.

In this way, M1, which measured 12 x 7 metres and is located towards the northern half of the site grid, was mainly formed by some of the squares with

higher concentrations of materials on the surface (see Figure 4), and the most deciding criterion to delimit and select this area was the location of abundant stones scattered on its surface as well as an alignment of blocks that presumably formed part of a structure towards its northern limit.

However, the excavation of M1 only documented one archaeological level consisting of a sandy deposit (SU 1), where abundant archaeological materials were located and which covered bedrock and a sterile reddish sandy deposit in the depressions of the bedrock itself. The excavation of this deposit uncovered more stones, most of them scattered in an unorganised distribution with the exception of the above-mentioned alignment, which only consisted in a stretch of a single one-faced course of medium to large roughly-squared stones. Despite the fragmentary evidence, the size of some of these stones and the absence of mortar or any other material to bid them together could indicate a much older origin, which instead of being Roman could date back to the Prehistory of the Island<sup>7</sup>. The location of some Pretalayotic (c. 2,200 – 1,200 BC) and Talayotic (1,200 -123 BC) pottery fragments during the survey and also the excavation of M1 could be indicative of an occupation of this settlement predating the Roman Late Republican period.

However, the most abundant pottery fragments located in M1 date from the Late Republican period and match the fabrics and typologies of those found during the survey: amphorae from southern Italy, Punic amphorae from Ibiza, Tarraconenses amphorae from the Layetanian region of nowadays Catatonia and Graeco-Roman amphorae of various fabrics, many of which are also from southern Italy as their fabrics indicate.

A more detailed analysis of these materials from M1 points to the majority of pottery fragments being amphorae, both in number and weight. In this way, 231 amphora fragments were recovered in this zone, whereas 86 fragments belonged to non-amphoric materials including common wares of various chronologies and typologies. Of the 86 sherds, it is worth mentioning that two are local Pretalayotic (Bronze Age) and eight are Talayotic (Late Bronze Age/ Iron Age), whereas eleven are indeterminate fragments that could not be identified due to their poor state of conservation. The 231 amphora fragments include 79 southern-Italic with the black sand fabric, being the most abundant group and weighing 3,189 grams. The lack of diagnostic fragments in this Italic

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<sup>7</sup> The architecture of the prehistory of Menorca is characterised by the use of the cyclopean technique, based on the construction of buildings with medium to large stones fitted together without the use of any type of mortar or binding material.

assemblage makes difficult to determine if they belong to Graeco-Italic amphorae produced in that area or to Dressel 1 typologies instead. However, one rim fragment presenting the typical fabric of this area of production is from a Dressel 1A (c. 135 – 25 BC) (See Figure 5). The second largest group of amphorae consists of those produced in the northeast of the Hispania Citerior province (later on Tarraconenses province), with a total number of 52 non-diagnostic fragments that weigh 2,289 grams. Even though this group presents fragments of different fabrics in regards to their colors, most of them are dark brown/ red fragments with an abundance of quartz tempers, which characterise the productions from the Layetanian region approximately matching the current Barcelona province. The third group is formed by the Ebusitan productions from the island of Ibiza, with 26 fragments that weigh 586 grams, being all of them non-diagnostic specimens. The rest of amphora fragments are all non-diagnostic as well, and little information can be drawn from them due to their poor conservation.

Of the diagnostic fragments located in this excavation zone, apart from the Dressel 1A of a southern Italic origin mentioned above, there are two lids belonging to the evolved or late Graeco-Italic typology, although they were produced in other regions as their fabrics differ from the Dressel 1A fragment. This is due to the fact that Graeco-Italic amphorae were produced in a wide area in the western Mediterranean, from Italy to other locations such as Punic Ibiza, Catalonia, Cadiz in the south of the Iberian Peninsula and southern France (Ribera i Lacomba, 2013: 238-240). Despite not being able to determine their origin, their morphology points to a late date of production, which inserts them in the late 2<sup>nd</sup> century BC.

Regarding the 86 sherds of common wares in M1, there are 21 Punic-Ebusitan fragments, a handle and base from a Punic jar of northern African origin, and a small representation of local prehistoric pottery with only two Pretalayotic and eight Talayotic fragments.

In addition to the pottery materials, in this zone malacological specimens, a lithic element (probably a stone sharpener), a circular grinding stone and a modern bullet were recovered, the later one adjusting to the frequentation of the area in modern times as attested by similar materials recovered during the survey.



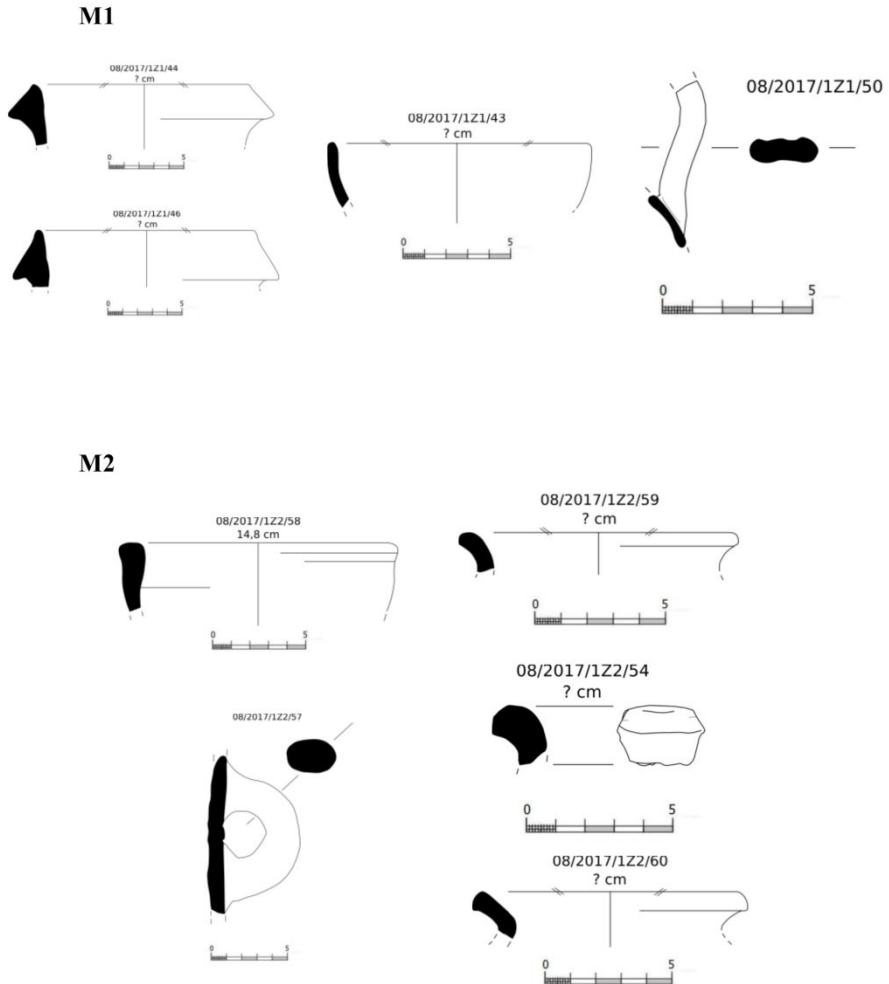


Fig. 5: Some materials located in M1 and M2. From left to right: M1: Graeco-italic amphora; Dressel 1A amphora; North-African bowl; North-African jar handle. M2: Pascual 1 amphora; Punic-Ebussitan amphora handle; Roman common ware pot; Talayotic pot; Roman common ware pot.

As for M2, this excavation zone was also selected due to the large quantity of materials located in this area during survey tasks, being formed by the squares presenting the highest percentages of materials, and the location of another possible rectilinear structure made up of stone blocks. M2 measures 7 x 4 metres and lies to the southeast of M1. The excavation of this zone, where also a single stratigraphic unit consisting of a sandy deposit was preserved, revealed a large quantity of materials, most of them dating back to the 2<sup>nd</sup> and 1<sup>st</sup> centuries BC too, mostly including the same typologies located in M1 and during the survey: Italian, Graeco-Italic, Punic-Ebusitan and Tarraconenses amphorae.

Regarding the alignment of stones, its poor preservation, fragmentary evidence and inconsistency did not allowed for the determination of a defined room or building in the zone, although, along with the large quantity of stones scattered throughout the site, it is indicative of the presence of a construction that has not come down to us due to its destruction either for anthropogenic or natural causes, as could be the case of those found in M1.

The materials from M2 included 313 amphorae fragments, forming a larger group of amphorae than the one in M1, despite this second zone being smaller, and 40 common wares including one Pretalayotic and seven Talayotic fragments.

In M2 the largest amphora assemblage is formed by the productions from the northeast of the Hispania Citerior province or Tarraconenses, with a total number of 119 fragments that weigh 5,330 grams, which is followed by the southern Italic group with 58 fragments that weigh 933 grams. As in the Italic evidence from M1, the distinction between non-diagnostic Graeco-Italic and Dressel 1 produced in southern Italy was not possible. Lastly, the third most abundant amphora group consists of the Punic-Ebusitan with 47 fragments that weigh 1,299 grams.

Even though, broadly speaking, the materials in both excavation areas and their percentages are basically very similar, in M2 the quantity of Tarraconoenses/Layetanian and Punic-Ebusitan amphorae increases, although the southern Italic group is also a predominant one. The most recent diagnostic fragment belongs to a Tarraconenses amphora of the Pascual 1 typology, which presents a chronology set between c. 40 BC and the end of the 1<sup>st</sup> century AD (López and Martín, 2008: 668-700). This and the fact of having a larger quantity of non-diagnostic Tarraconenses amphora sherds in this area could

suggest the use of the headland, or at least its frequentation, during the late 1<sup>st</sup> century BC and even the early 1<sup>st</sup> century AD. Materials which are not pottery fragments include eight malacological specimens.

The study of the materials recovered during the excavation of the two zones (M1 and M2) shed light on the use of the headland in three different periods, which mostly coincides with the results obtained through the analyses of the pottery evidence located during the systematic survey. In this way, these materials also point to a first occupation in an indeterminate moment of the Prehistory of Menorca (2,200 – 123 BC), something that was also observed in the preserved structure in M1, which could have formed part of a prehistoric building due to the characteristics it presents. In this way, the stones also scattered throughout this zone could have belonged to constructions that were knocked down in an indeterminate period. This first occupation could also be related to the cave located nearby, which has been mentioned at the beginning of this paper, which had different functions at different stages, being used as a cattle shelter and as a burial place in different phases of the Pretalayotic period. According to the archaeologists who were responsible for the excavation of this Cova des Morts, the oldest use of the cave took place during the first half of the 2<sup>nd</sup> millennium BC (Bergadà and Nicolás, 2005).

The interpretation of this first occupation of the cave is that of having been a shelter for domestic species, mostly bovidae and ovicaprins (Bergadà and Nicolás, 2005). Thus, a relation between a possible settlement on top of the promontory and the nearby animal shelter in the cave during this period could be established.

Since the Pretalayotic pottery recovered both in the survey and the excavation of both areas only offers a very general and wide chronology (2,200 BC- 1,200 BC) and no single remain has been found that could be radiocarbon dated, only a general chronological approach can be done in order to date the first occupation of the Mongofre Nou site on top of the promontory in relation to the cave. This cave offered a total of seven archaeological levels, some of which were C-14 dated. In this way, levels 4, 5 and 6 (being level 7 the bedrock) would date back to the Pretalayotic period and presented the following dating according to Bergadà and Nicolás (2005):

Level 4: 1614 cal BCE (UBAR-530)

Level 5: 1674 cal BCE (UBAR-419)

Level 6: 1752 cal BCE (UBAR-531)

In this paper, the authors only intend to suggest the possibility of the relation between the two sites due to their spatial and chronological proximity, even though the lack of further evidence on site do not allow for establishing a clearer pattern of occupation in this first phase of use of both of them.

However, as is also shown by the materials recovered from the superficial survey, the largest pottery assemblage is formed by elements that date back to Roman times, from the Late Republican period to the early Empire period, even though the vast majority of them date back to the former (2nd and first half of the 1st centuries BC) and are mostly represented by Italian (black sand fabric) including Dressel 1A, evolved Graeco-Italic, Layetanian and Punic-Ebusitan amphorae. Some common wares, even though in much lesser quantities, include Italian and Ibizan productions. The artefacts located in both survey and excavation which date back to this second occupation of the headland point to a Roman occupation in an indeterminate moment around the 2<sup>nd</sup> century BC until the middle of the 1st century BC, although some materials suggest the use of the headland also in the late 1<sup>st</sup> century BC or even early 1<sup>st</sup> century AD, such as the Pascual 1 amphora rim. These more recent materials could indicate the prolongation in the use of this site or its frequentation in certain moments prior to its abandonment. Regarding the stone alignments and dispersion in both excavation zones, a possible explanation of their fragmentary nature could have been that of previous buildings, possibly from a small Pretalayotic settlement and in connection to the Cova des Morts animal shelter, being destroyed during this period by the Roman settlers of the headland. These could have reused the stones from preexisting buildings to build some sort of structures, which were later on destroyed either by human or natural factors.

Lastly, the third period of use of the top of the headland is only characterised by its frequentation by visitors of different kinds including hunters, hikers and tourists in much recent times.

### **4.3. Conclusions of the Mongofre Nou survey and excavation project**

With the archaeological intervention at the Cap Gros coastal headland in Mongofre Nou (Maó, Menorca) a broader research project has started, whose main aim is that of studying the Roman military presence of Menorca during the last centuries of the first millennium BC, to assess the patterns of distribution of the first Roman installations to better understand the impact of the arrival of the

new power to the island and the strategies of control of its coast and inland territory.

The first site under study has shed light on the occupation of a coastal headland between the second century BC and the middle of the first century BC, which point to strategic reasons due to the location of the site on top of a promontory from where to control the arrival of vessels to the beaches at both sides of it, as well as an important natural port located to the West (Addaia port), where both Roman underwater and terrestrial remains are found. Hence, the control of this port from different positions would have been an important task since the beginning of the Roman occupation of Menorca.

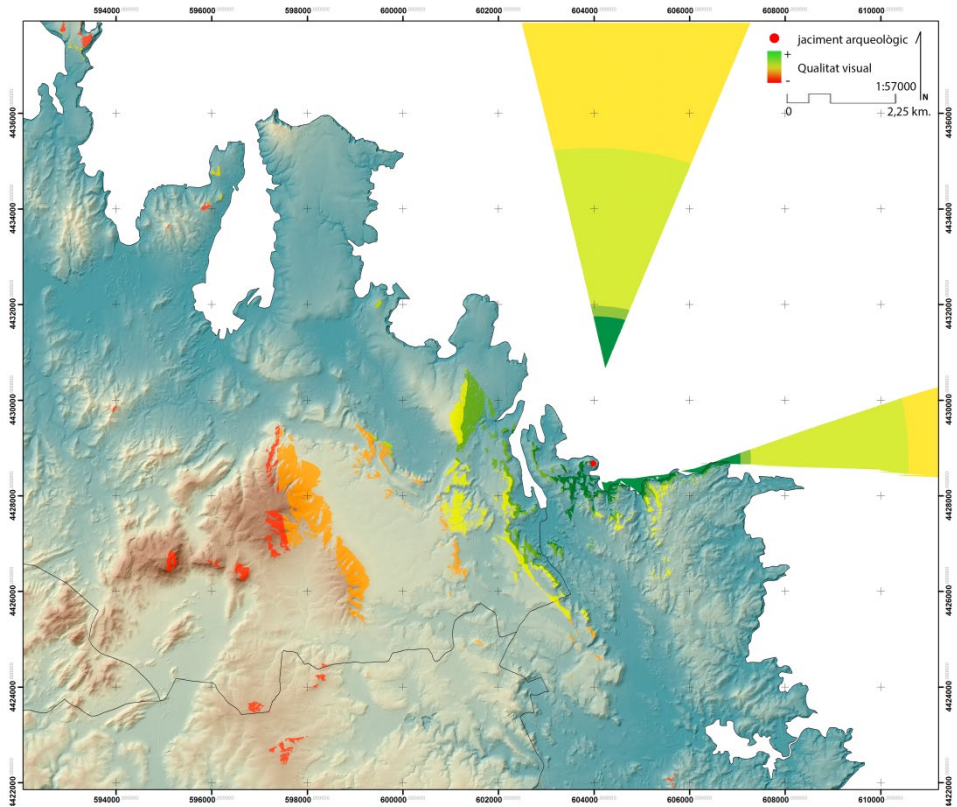


Fig. 6: Visibility from the centre of the Mongofre site.

Even though the structural evidence in Mongofre Nou is scarce due to the poor state of preservation of the remains from possible walls, most probably due

to meteorological conditions (although a possible anthropogenic cause cannot be ruled out), this fact also allows for the formulation of various interpretations related to the temporary nature of these installations, which could have had structures made of perishable materials including leather tents and rustic stone structures to delimit spaces for protection. To better define the type of structures this strategic installations would have had, the study of other coastal sites in the future would hopefully increase the knowledge on this topic and other aspects related to material culture, as well as to better define their chronological frameworks.

## GENERAL CONCLUSIONS OF THE PROJECT

The study of Roman Menorca still has many gaps of knowledge, including centuriation, communication means, rural settlements and the conquest itself, amongst others.

Being an island whose main natural ports could have offered a safe stop for vessels travelling across the western Mediterranean transporting commercial goods, one of the first concerns of Rome on the island would have been related to the control of its coast. With only one identified and excavated military camp, which dates back to the conquest and the so-called Sertorian wars and was active until the middle of the first century BC (Contreras et al., 2006) and a Republican *castellum* or fortified settlement in Mago in nowadays Maó (Rita and Plantalamor, 1988), little is known about the arrival of the Roman military forces during the conquest (123 – 121 BC) and the strategies used by the Roman army during the first decades of the Roman rule on the island.

For this reason, the inspection and study of potential sites on the coast offers the possibility of acquiring valuable information about the last two centuries of the first millennium BC, which meant a total transformation of the society, economy and politics on Menorca with its conquest by Roman general Metellus.

The aim of the project is to inspect the coast of the island, paying special attention to those places that present a good visibility of both the coast and inland (mainly promontories) and close to beaches or coves that could grant a safe entrance and anchorage for vessels, as would be the case of the Mongofre Nou site, being the first installation that has been studied.

Visual inspections of those areas with Late Republican materials on the surface would be considered for the development of further actions including

systematic surveys and, in case it is necessary, excavations to gather information about a possible network of coastal sites that could have existed on the island to effectively control its surrounding coast and inland territories. The study of this type of sites would allow for the compilation of a map showing the location of these installations and their nature, since other coastal sites can be found with a different function and chronology (e.g. commercial). In this way, Menorca counts with a site located in s'Alairó (Es Mercadal), which is located some metres away from the beach that bears the same name and where archaeological excavations took place in the nineties of the 20<sup>th</sup> century (Nicolás and Pons, 2018). The study of this site offered a chronology framed in the first two centuries AD and a function of reception and storage of goods from the sea, including amphorae and a collection of marble sheets from various locations (Nicolás and Pons, 2018). Thus, this coastal site accounts for the existence of another typology of Roman coastal installation with a function related to commercial purposes once the Romanisation process was consolidated. In this way, a map could be compiled showing the two types of coastal sites: militaristic and commercial, and patterns of distribution could be defined for their location. Even though the existing evidence is scant, according to the data offered by the Mongofre Nou and s'Alairó sites, it seems installations of a military function would be located in higher positions in promontories, whereas commercial outposts would be located in lower position in beaches.

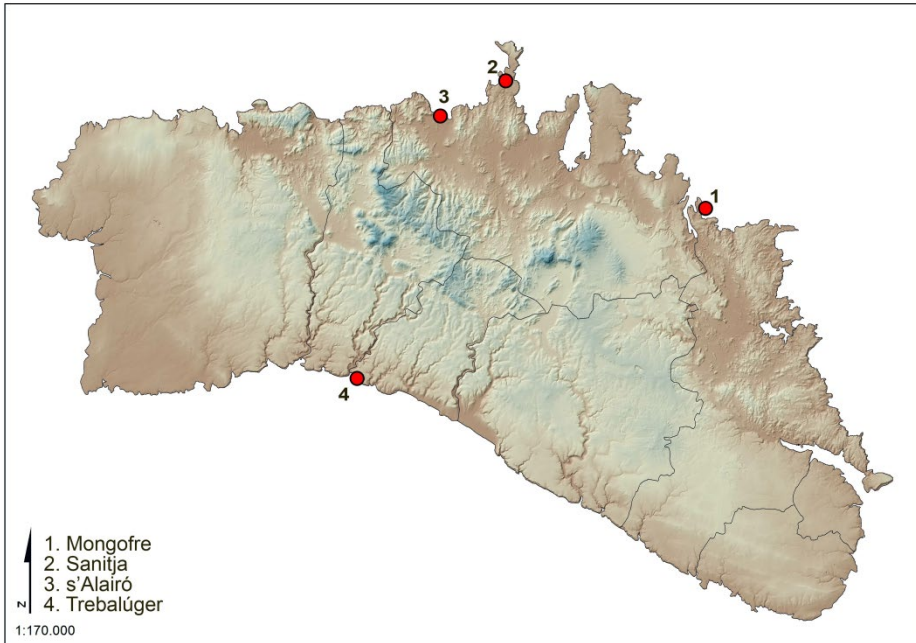


Fig. 7: Map of coastal sites mentioned in the paper.

As can be seen, the study of Roman coastal sites offers a great opportunity to obtain important information about different aspects of Roman Menorca, including the military occupation of the island, but also offers the chance to locate other coastal sites that can shed light on the distribution of settlements of various functions, all of which can definitely contribute to delve into the Roman History of this Balearic island.

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