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The Republican Wreck at Nido del Cuervo (Águilas, Spain): Rediscovering a Roman Lead Ingot-carrying Ship

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ABSTRACT

The Nido del Cuervo site (Águilas, Spain) has traditionally been interpreted as one of just a few Late Republican Roman lead ingot carrying wrecks, due to the exceptional discovery of 15 Roman ingots at the site. Although the remains were never published, the original excavation report indicated a consistent cargo of Dressel 1C and Dressel 28 amphorae and suggested that the ship sank around 60–50 BC. This study involves the review of all the unpublished preserved remains recovered from the site, with the caveat that no section of a ship's hull has been documented, and challenging the assumption that these amphorae were part of the cargo of a single ship. Much of the materials thought to be Republican are, in fact, Imperial or Late Roman. The reinterpretation of the context suggests that some of the materials may belong to a late 1st-century BC wreck.

El pecio republicano en Nido del Cuervo (Águilas, Spain): Redescubriendo un barco romano con un cargamento de lingotes de plomo

RESUMEN

El yacimiento del Nido del Cuervo (Águilas, Spain) ha sido interpretado tradicionalmente como uno de los pocos pecios romanos tardorrepúblicanos cargados de lingotes de plomo, debido al hallazgo excepcional de 15 lingotes romanos. Aunque no existen publicaciones sobre los restos, el informe de la excavación original indicaba un cargamento consistente de ánforas Dressel 1C y Dressel 28 y sugería que el barco se hundió alrededor del 60-50 a.C. Este estudio supone la revisión de todos los restos preservados inéditos recuperados del sitio, con la advertencia de que ninguna sección del casco del barco fue documentada, y cuestionando la suposición de que estas ánforas eran parte del cargamento de un único barco. Gran parte de los materiales considerados republicanos son, de hecho, imperiales o tardorromanos. La reinterpretación del contexto sugiere que algunos de los materiales podrían pertenecer a un pecio de finales del siglo I a.C.

西班牙阿吉拉斯尼多库尔沃 (Nido del Cuervo) 的罗马共和国沉船：一艘古罗马运铅船的再认识

摘要

西班牙阿吉拉斯尼多库尔沃 (Nido del Cuervo) 因其间罕见出土了15块罗马铅锭，从而历来被认为是仅有的几处罗马共和国晚期运载铅锭的沉船遗址之一。尽管这些遗存从未发表过，但最初的发掘报告表明船上满载德雷斯1C式和德雷斯28式双耳细颈瓶，并认为该船沉没的时间大约在公元前60-50年。在谨慎对待船体本身的任何部分都未曾做过记录这一状况下，本研究包括了对遗址所有已发掘但未发表的遗物的重新检视，并对这些双耳细颈瓶属于同船货物这一假设提出质疑。许多被认为是共和时期的遗物实际上属于帝国时期或罗马共和国晚期。对背景的重新解读表明，其中一些遗物可能属于一艘公元前1世纪晚期的沉船。

西班牙阿吉拉斯尼多库尔沃 (Nido del Cuervo) 的羅馬共和國沉船：一艘古羅馬運鉛船的再認識

摘要

西班牙阿吉拉斯尼多庫爾沃 (Nido del Cuervo) 因其間罕見出土了15塊羅馬鉛錠，從而歷來被認為是僅有的幾處羅馬共和國晚期運載鉛錠的沉船遺址之一。儘管這些遺存從未發表過，但最初的發掘報告表明船上滿載德雷斯1C式和德雷斯28式雙耳細頸瓶，並認為該船沉沒的時間大約在公元前60-50年。在謹慎對待船體本身的任何部分都未曾做過記錄這一狀況下，本研究包括了對遺址所有已發掘但未發表的遺物的重新檢視，並對這些雙耳細頸瓶屬於同船貨物這一假設提出質疑。許多被認為是共和時期的遺物實際上屬於帝國時期或羅馬

KEYWORDS

shipwreck; lead mining; amphorae; redistribution; Late Roman Republic

PALABRAS CLAVE

pecio; minería de plomo; ánforas; redistribución; República tardorromana

关键词

沉船; 铅矿开采; 双耳细颈瓶; 重新分配; 罗马共和国晚期

關鍵詞

沉船; 鉛礦開采; 雙耳細頸瓶; 重新分配; 羅馬共和國晚期

الكلمات الدلالية

خطم السفن
تعددين الرصاص
الأمفورات
إعادة التوزيع
أواخر الجمهورية الرومانية

共和國晚期。對背景的重新解讀表明，其中一些遺物可能屬於一艘公元前1世紀晚期的沉船。

الخَطام الجمهوري في نيدو ديل كويرفو (أغيلاس، إسبانيا): إعادة اكتشاف سفينة رومانية تحمل سبائك الرصاص

المستخلص

تم تفسير موقع نيدو ديل كويرفو (أغيلاس، إسبانيا) بشكلًا تقليدياً على أنه واحدٌ من عدد قليل من خَطام السفن الرومانية المتأخرة التي كانت تحمل سبائك الرصاص وذلك بسبب الاكتشاف الاستثنائي لعدد ١٥ سبيكة رومانية في الموقع. وبالرغم من أن البقايا الأثرية لم تُنشر على الإطلاق، إلا أن قد أشار تقرير التنقيب الأصلي إلى وجود شحنة متناسقة من الأمفورات نوع Dressel واقتراح التقرير أن السفينة قد تكون قد غرقت حوالي ٦٠-٥٠ قبل الميلاد. ولهذا تتضمن هذه الدراسة، ٢٨ Dressel و 1C إعادة النظر في جميع البقايا المحفوظة وغير المنشورة التي تم انتشالها من الموقع، مع التنبيه على أنه لم يتم توثيق أي جزء من هيكل السفينة، مُتحدياً الافتراض القائل بأن هذه الأمفورات كانت جزءاً من حمولة سفينة واحدة. ومن الجدير بالذكر أن الكثير من المواد التي كان يُعتقد أنها جمهورية، هي في حقيقة الأمر إمبراطورية أو رومانية متأخرة. ويُشير إعادة تفسير السياق إلى أن بعض المواد قد تنتمي إلى خَطام يعود إلى أواخر القرن الأول قبل الميلاد.

1. Introduction

In 1977, 15 Roman lead ingots were recovered in the waters off modern Águilas (Murcia, south-eastern Spain), about 2 km east of what was an important Roman trade centre linked to silver and lead mining. The site lay west of Hornillo Bay, which was extensively used as an anchorage in Antiquity (Figure 1). The ingots were adjacent to the cliffs of Nido del Cuervo, which gave the site its name (the site is referred to as ‘El Hornillo’ by Parker, 1992, p. 213). Despite early reports that deemed the lead ingots to be the cargo of a shipwreck, no remains of the hull appear to have been identified at that time (Domergue & Mas García, 1983).

The discovery was one of the most significant recoveries of lead ingots in an underwater site; most wrecks or casual finds have only provided a small number of these items (Domergue & Rico, 2014; Rico & Domergue, 2016). The relevance of the finds increased when their chronology was judged to be Late Republican (Domergue & Mas García, 1983). However, the prominence of the site in modern literature contrasts with the absence of any reports on the finds. Only one short note was ever published, and it consisted of the analysis of only one of the ingots and the mention of the presence of Dressel 1C amphorae (Domergue & Mas, 1983). In 1992, the area was explored again, but these results were again not published. The ingots, pottery, and other materials recovered during these two seasons are stored in three different institutions: the National Museum of Underwater Archaeology (henceforth, ARQVA), the Archaeological Museum of Águilas and the Casa de la Moneda Museum of Madrid. The area is hardly accessible now due to the presence of a large field of *Posidonia oceanica*, which did not allow the site to be explored during a recent underwater survey in 2022 (Quevedo et al., 2024b).¹

This study has aimed to analyse all the archival documentation held by ARQVA, where Julio Mas’ personal archive is kept, as well as to review all

archaeological materials extracted from the site for the first time. Through archive archaeology, we have been able to determine the circumstances of the original excavation, recover the original artefacts, and understand the reasons why they were never published. Due to the different nature of the interventions on the site, the lack of systematic excavations, the uncertainty regarding the origin of the extracted materials, and the fact that these have never been thoroughly studied, there is the need to reconsider the deposit through a detailed analysis of the archaeological record and the maritime landscape and trade routes in which the site is situated.

2. Geography and Maritime Landscape

In modern times, Águilas extends over an area of 251.8 m² and is located within the administrative borders of the Region of Murcia, in the south-eastern corner of Spain (Figure 1). In Antiquity, it constituted a coherent micro-region enclosed by a series of mountainous ranges in the shape of rings which are now divided into three different municipalities (Águilas, Lorca, and San Juan de los Terreros). This micro-region flourished in an isolated position from the Iberian interior, but its extensive coastline and adjacent plains facilitated access by the sea. Precisely, the site lies in the middle of what was once a highly-frequented trade route, known to all vessels that headed south after arriving to Cape Palos. The Augustan and modern cities developed on an isthmus flanked by two bays (Levante and Poniente), south of the region. The possible *territorium* of the Roman city might have extended from Siscal (Lorca), where the last crests of Lomo de Bas fall into the sea, to San Juan de los Terreros (Almería) (Hernández García, 1995, 2010; Quevedo et al., in press).

The territory is part of the Baetic System, defined by a large number of ravines and torrents (*ramblas*) that, together with the sharp reliefs and their proximity to the sea, make its landscape very compartmentalised,

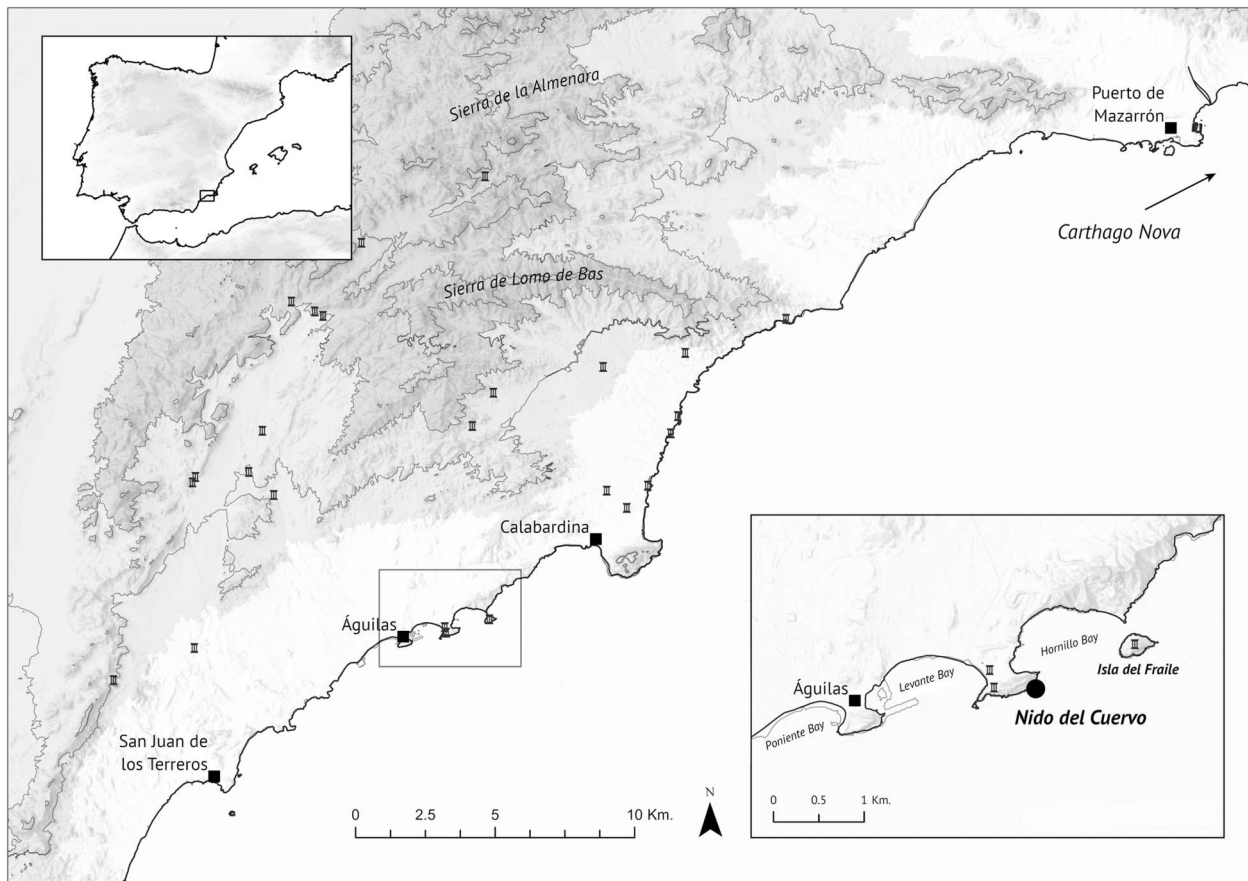


Figure 1. Location of Águilas, situated on the south-eastern coast of Spain, and Nido del Cuervo, west of Hornillo Bay. The shafts indicate Roman sites within the municipality of Águilas. The grey line represents the modern coastline, while the black line depicts the ancient coastline (Joel Bellviure).

with small semicircular formations. The coast of Águilas from Siscal to the Sierra del Aguilón is characterised by mountains that dive directly into the sea and a rugged and rocky coast with a profusion of coves, followed by cliff sectors with wide beaches suitable for anchoring and coastal navigation (Sánchez et al., 1979). The coastal stretch has a steep morphology, with ranges that plunge directly into the sea and plains dotted with argentiferous hills. The presence, in its vicinity, of significant metalliferous sources, well-irrigated valleys suitable for agriculture, and beaches and bays well-sheltered from the winds, formed the basis for the establishment of productive and commercial settlements (Hernández García, 1995, 2010).

The sector closest to the underwater site stretches from the north, around Cape Cope (242 masl) and south of modern Calabardina. These distinctive geological formations facilitate identification by seafarers, making them crucial navigation guides. The white finish caused by the eroded limestone of many of the sector's capes (e.g., Cape Cope) sets them apart from the slate and rounded hillocks in the surroundings. Characteristics of this coastal stretch also include numerous bays with expansive beaches interspersed among the rocky features, such as Calabardina, Hornillo Bay, Levante Bay,

Poniente Bay, and Calarreona (López Bermúdez et al., 1986).

The coast that surrounded the ancient settlement (of unknown name) at modern Águilas was divided into a series of three bays separated by capes and their isthmuses (Figure 1). The urban centre, which flourished on the southwestern-most peninsula, was flanked from the west by Poniente Bay and from the east by Levante Bay. Further to the north-east, the latter was enclosed by another cape, the Punta de la Aguilica, followed by Hornillo Bay, thus creating a second isthmus. Hornillo Bay functioned as a commercial hub for anchoring and the transferring of goods between ships, and Isla del Fraile, which encloses it to the east, was permanently inhabited at least since Late Antiquity (Quevedo et al., 2024a).

The underwater archaeological site that is the subject of this paper is located by the southwestern entrance to Hornillo Bay, a few metres from the north-eastern slope of the Punta de la Aguilica, close to an abrupt cliff section known as Nido del Cuervo (Crow's Nest). The area is characterised by an irregular and stepped topography that alternates rock concentrations with meadows of oceanic *Posidonia oceanica*, at 16 to 18 m depth.

In terms of ancient maritime routes and traffic, the location can be linked to the vibrant commercial landscape of the south-eastern Iberian Peninsula during Roman times. The coastline of *Hispania Carthaginiensis* has been highlighted for its strategic position as one of the most important junctions in the western Mediterranean, thanks to navigation conditions that facilitate communication with North Africa, the Italian peninsula and the south of France and the Strait of Gibraltar (Arnaud, 2005). From Republican times to Late Antiquity, the port of Cartagena (*Carthago Nova*), to the northeast, and its redistribution harbours were the organising axis of commercial maritime traffic (Ramallo Asensio & Martínez Andreu, 2010), to which a series of secondary areas were associated, such as smaller ports, anchorages and *stationes maritimae* (Cerezo Andreu, 2022). This is the case of the settlement at Águilas, which served at least from the Late Republican Period as a connection point supplying metal and other goods to the small and large cabotage routes that radiated or converged towards the major centre of Cartagena/*Carthago Nova*.

Following the methodological approach suggested by some scholars (Cerezo Andreu, 2014; Izquierdo i Tugas, 2018), we conducted an analysis on the major maritime constraints (winds, waves and currents) based on modern and historical data (data from 2008, monitored from a SIMAR station [2066089] at Cape Cope [WGS84, 37°25'12.0"N, 1°30'00.0"W]; historical data are available at <https://www.puertos.es/es-es/oceanografia/Paginas/portus.aspx>). From this it emerged that the navigation conditions are not disadvantageous in this stretch of coast but would have been detrimental to any sailing ships entering Hornillo Bay under heavy winds. The predominant winds are the Levante (blowing from NNE-NE-ESE) and the Lebeche (WSW-SW-SSW). They are intense, easily exceeding 8 m/s (around 15 knots). In the months of *mare apertum*, between April and October (Apul. *Met.* XI), they blow consistently and gently, allowing for navigation, while in the winter months they reach a force which often descends into storms and gales. Despite the winds, the wave action is minor and 80% of the yearly waves do not exceed 1 m in height, making these coasts favoured locations for anchoring vessels.

The area is not significantly affected by currents of great magnitude, either (see SIMAR Cape Cope station data [2066089], noted above). The dominant current runs close to the coast in a NE-SW direction, facilitating navigation to the south, towards the Strait of Gibraltar. Moving a bit farther from the coast (about 40 nm), there are current alterations from Gibraltar to the vertex of Cape Palos. On one side, these currents descend towards Africa, favoured by the Levante winds, and on the other side, they support navigation towards the Balearic Islands and the

central Mediterranean. In general, coastal navigation, both large and small cabotage, can be undertaken feasibly in this stretch. The numerous and wide bays for shelter, the large amount of mountains and capes for orientation, and the abundant ravines and caves for water collection, characterise the maritime landscape of this area. Furthermore, the coastal breezes, which are very favourable and quite strong due to the high mountains located a short distance from the coast, provide ideal conditions for sailing even in the absence of winds.

The only effects that can hinder navigation are the Lebeche storms, which still cause significant problems today. The strong winds from the southwest quadrants are unpredictable and can quickly reach significant magnitudes, pushing boats towards the coast and hindering entry into one of the more sheltered bays. Hornillo Bay, which is protected on one side by the cliffs of Nido del Cuervo and on the other by Punta del Cigarro and Isla del Fraile, has historically been a strategic anchorage point and, until a few decades ago, the main secondary port of Águilas (García Antón, 1985; Palacios Morales, 1982). On the contrary, the peak of Nido del Cuervo, although a good landmark for navigation at sea, has always been a danger to navigation in those waters.

3. Republican Archaeology in Águilas

The coastal strip of Águilas was settled notably late, not formally until the Roman Period. During the Iberian Period (550–201 BC), some sites flourished in the interior valleys, mainly in the Tébar Valley, but there is no evidence of direct interactions with the sea (Hernández García, 1995, p. 195; Palacios Morales, 1982, pp. 121–142). Similarly, it appears that neither its natural harbours nor its silver mines were used by the Barcids during the Punic conquest of the region, even when they held a stronghold in neighbouring Baria (Villaricos) (Gell. *NA.* 6.1.; Plut. *Apoph. Scip.* 3.; Val. Max. 3.7.1.). The only known example of Punic pottery recovered from the waters is a PE-17 = T-8.1.3.2 amphora from Ibiza found near the modern docks (Guerrero Ayuso & Roldán Bernal, 1992, p. 159). However, its dating in the 2nd century BC puts it in the timeline of the Roman conquest.

The region must have come under Roman control after the conquest of Cartagena/*Carthago Nova* by Scipio Africanus in 209 BC (Polyb. 10.8–15; Liv. 26.42–50; App. *Hisp.* 20–24), perhaps after the Iberian campaign was over, although its Latin name remains unknown. A few Late Greco-Italic amphorae recovered from the port of Águilas and off the coast of the municipality reveal an early Roman presence at about the same time that the *Escombreras 1* wreck sank in the mid-2nd century BC in the bay of Cartagena/*Carthago Nova*. This is not strange, since this mining sector has

been convincingly identified as the western limit of the economic hinterland of Cartagena/*Carthago Nova*, following Polybius' (apud Strab. 3.2.10) description of its extension as 400 *stadia* (Palacios Morales, 1982, p. 185, Ramallo Asensio, 2011, p. 36).

On the slope of the isthmus where the modern urban centre of Águilas lies, several fragments of black gloss ware and amphorae dating to the first half of the 2nd century BC were found in association with a possible warehouse (Hernández García, 2004, p. 441).² Further to the north, Republican pottery was found in connection with structures linked to possible port facilities (Hernández García, 1999, p. 284, n. 10; Hernández García & Muñoz Yesares, 2007). The sheltered isthmus, with access to its adjacent bays, would have functioned as the primordial core of the later Augustan town. Based on some excavated storage structures adjacent to an anchorage area, the function of the early settlement must have been that of a maritime station associated with coastal navigation and the resupply of ships, since no other incentives seem to have been seized upon in the area at the time (Hernández García, 2010).

Shortly after, during the later 2nd century and the 1st century BC, the area was used as a mining outpost for the redistribution of metal. North of the isthmus, near the Cabezo del Aguilón, furnaces associated with litharge, fragmented crucibles, and lead slags have been found (Hernández García, 2010, p. 264). This reveals that galena ore was directly being transported and processed in the area for the extraction of silver and lead, prior to its shipment to a redistribution port, perhaps Cartagena/*Carthago Nova*. The evidence for mining outposts from this point to the northern limit of the sector of Águilas is strong. In the last years, a sequence of sites with Roman pottery and metal waste – some dating to the mid-2nd century BC – has been identified along the coast. The most important of these is at Pocico Huertas, a relatively isolated site with a natural harbour pier and possible transport ramp or slipway (Palacios Morales, 1982, pp. 162–163). The site must have functioned as a small harbour for the processing of litharge and its transportation by sea.

In Hornillo Bay, adjacent to the Nido del Cuervo site, Republican and early Imperial materials are frequently recovered. Several unpublished amphorae once looted by divers have been donated or retrieved by the Municipal Archaeological Museum in the course of the last 70 years. The most recurring types near the site are Dressel 1A (6), 1B (3), and 1C (4) from Latium and northern Campania, and Ovoid 1 and Dressel 12 from Málaga (*Malaca*) and Cádiz (*Gades*) (Figure 2). By the neighbouring Isla del Fraile, a coastal islet frequented at least since the early 1st century BC (Quevedo et al. 2023, 2024a, 2024b, in press), an important set of Italian table and cooking

wares was recovered during an underwater survey, dating to ca. 80–30 BC (Figure 3). This set, which included Campanian black gloss wares, must have been lost to the sea during a transfer operation near the island or jettisoned by the crew. An Apulian Lamboglia 2 amphora with the stamp 'SABINA', dating to the same period, was also found near the island (Figure 2a).

Occupation of the isthmus behind the cliffs of Nido del Cuervo dates from at least from the 1st century BC. There, fragments of Italian amphorae and black gloss ware B plates were found in the 1970s, one with an incised schematic representation of an anchor (Hernández García & López Martínez, 2011, pp. 70–71; Palacios Morales, 1983, p. 950). In 1995, on a small land plot near the site, a level with materials dated around the 1st century BC and the Julio-Claudian Period was also discovered (Hernández García, 2002, pp. 436–437; Hernández García & Muñoz Yesares, 2007, p. 195). All the evidence suggests that the area around Nido del Cuervo served as a commercial or fishing area, possibly operating as an anchorage point. However, the possibility of it being a secondary settlement or production site should not be discarded. The study of the site is essential to understanding the nature of this area during the Late Republican Period.

4. The Nido del Cuervo Site

4.1. The Discovery and Early Excavations

In August 1975, Julio Mas, director of the *Patronato de Excavaciones Arqueológicas Submarinas* of Cartagena, carried out an underwater survey around Isla del Fraile while simultaneously excavating the Late Antique remains on the island. The underwater surveys were deemed unsuccessful, although some scatters of pottery were identified and collected, including those of an important Republican ensemble (Figure 3).

In June 1977, French divers, authorised to film the local flora and fauna, fortuitously discovered an important concentration of Roman material west of Isla del Fraile and attempted to extract it. The intervention of the local authorities, which were tracking the divers, and the archaeological service led to an investigation that allowed the recovery of the lead ingots and amphorae which had been extracted underwater by the cliffs of Nido del Cuervo (Palacios Morales, 1982, p. 168). Following this discovery, Julio Mas carried out the first excavation on the site and recovered additional amphorae, alongside eight additional ingots. He interpreted the finding as the remains of a shipwreck, dating it to the 2nd–1st centuries BC (Mas García, 1980, pp. 255–256). According to him, the main cargo consisted of Dressel 1C amphorae (Domergue & Mas García, 1983; Pinedo

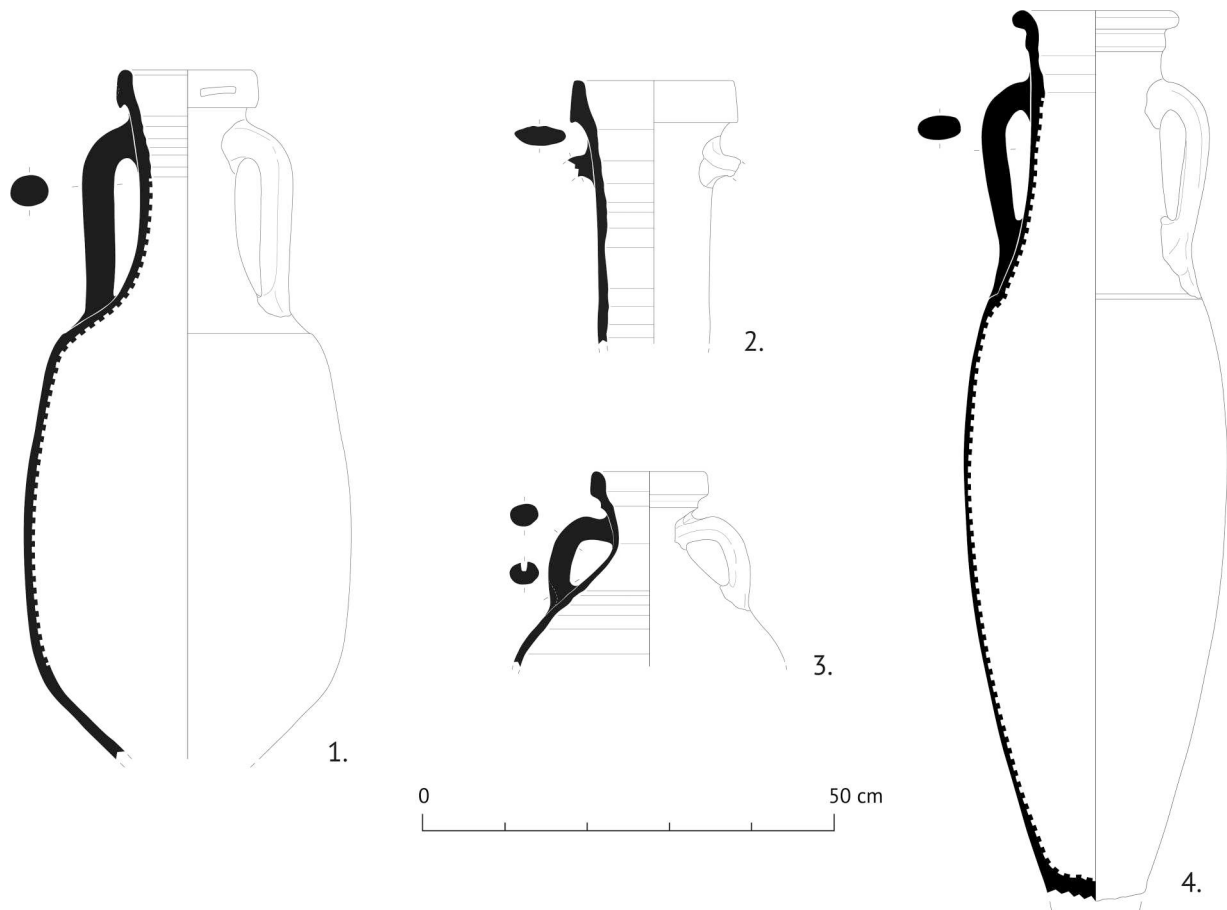


Figure 2. Roman amphorae illegally retrieved from the waters off Águilas and currently stored in the Municipal Archaeological Museum: 1. Apulian Lamboglia 2 amphora, featuring a stamp *in orlo* reading 'SABINA', recovered nearby Isla del Fraile. 2. Italian Dressel 1B amphora from the Bay of Naples. 3. Southern Spanish Ovoid 1 amphora from Vélez-Málaga. 4. Southern Spanish Dressel 12A3? from Málaga/Málaga (Joel Bellviure).

Reyes, 1996, p. 80), together with amphorae that have been sometimes described as Dressel 28 (Mas García, 1980, p. 256, 2004, pp. 67–68; Parker, 1992, p. 213; Pérez Bonet, 2008, p. 25). No reference was ever made to the remains of a ship, but the authors

presumed that the site unequivocally had formed as a result of a shipwreck. The intervention seems to have been focused on the indiscriminate recovery of all artefacts in the area, whether belonging to a closed context or not.

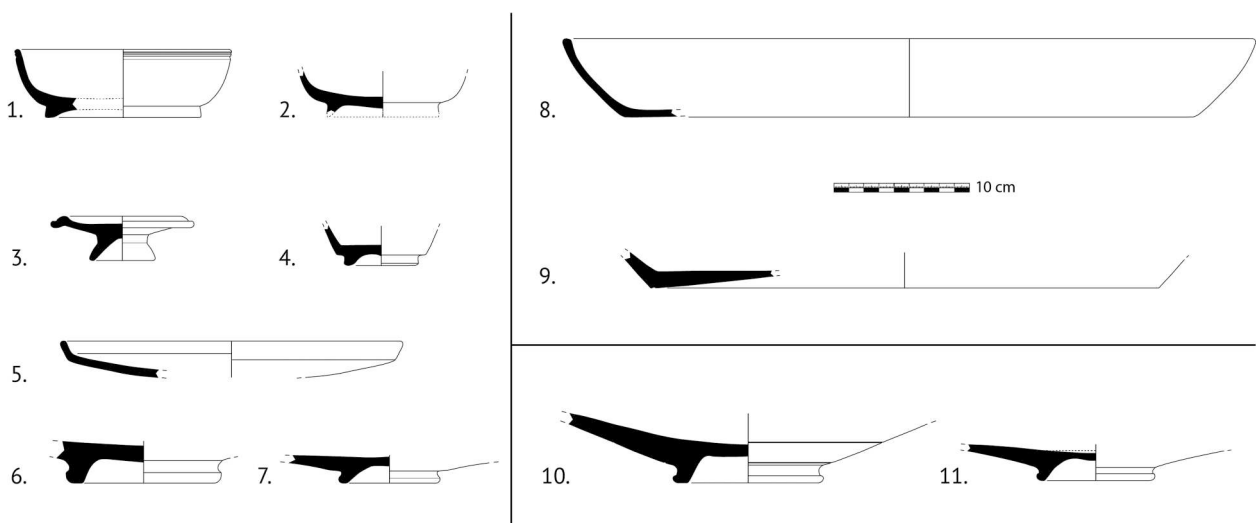


Figure 3. Pottery recovered from an underwater Republican deposit by Julio Mas in 1975, near Isla del Fraile, ca. 80–30 BC: 1–7. Italian black gloss ware B, possibly Caes, bowls, cups, and plates, 8–9. Cooking ware, Bay of Naples, *patinae*, 10–11. Italian common ware or heavily eroded Italian black gloss wares, plates (Joel Bellviure).

In an unpublished letter, Mas communicated to Claude Domergue – at that time, the main reference for the study of archaeological metal in southern Spain – that they had seized ‘a batch of seven ingots and a large quantity of Roman pottery’ (Figure 4) (Mas García, *ca.* 1977a). In a second letter, written after the excavation, Mas informed Domergue of his intention of ‘locating this site on the coast of Águilas and, thus, the possibility of recovering some ingots with the complete inscription’ (Mas García, *ca.* 1977a). The result of this exchange was a co-authored conference paper which presented the underwater site but only mentioned the ingots (Domergue & Mas García, 1983). From that moment on, the site remained completely unpublished, including its plans and the drawings of a ship’s hull, if any, and its cargo. Shortly after the discovery, Mas informed Domergue that his attempts to publish the finds in the museum’s journal – *Mastia* – had come to a halt due to his involvement with the Francoist regime during the country’s transition to democracy.²

4.2. Later Surveys and Archival Research

Between September and October 1992, the coast of Águilas was surveyed as part of the activities scheduled by the then Centre for National Underwater Archaeological Research, now ARQVA, based in Cartagena. Among the surveyed sites, the Nido del Cuervo site was revisited, where the hull of a ship, allegedly that surveyed by Mas, was documented alongside some amphorae (Pinedo, 1996, p. 80). The unpublished report stated that during the survey ‘a high degree of looting was attested [...] and the extent of the site was delimited through a circular survey’ (Pinedo Reyes, *ca.* 1992). On the surface, there were only fragmented amphora sherds. As a result, a grid was implemented on top of the site, and a photogrammetric scan was performed around the archaeological remains. Only a small trench was established, from which a series of ceramic finds, as well as the ship’s lead sheathing and square-sectioned nails, were recovered. They led the excavators to the conclusion that the dating of the site may have to be extended to the 1st century AD, based on the recovery of a Dressel 7–11 amphora in connection with the remains of the ship (Pinedo, *ca.* 1992).

Since then, no archaeological intervention took place in Hornillo Bay until 2021, when an underwater survey with renewed methodology was carried out in relation to the study of the neighbouring Isla del Fraile (Quevedo et al., 2023, 2024b). During this season, the site could not be located due to the presence of *Posidonia* fields, and it was discovered that rocks precipitated from the nearby cliffs might have accumulated on top of the site and partially buried it. The conditions of the 1977 and 1992 excavations, as well as the proposed

identifications and dates of the ceramic types and the presumed remains of the hull, are problematic. From the published data, the amphora types suggested by the authors (Dressel 1C, Dressel 7–11, and Dressel 28) are not chronologically compatible and stand a century apart. Pinedo’s (1996) assessment of the existence of a hull contrasts with his recording of a Dressel 7–11 amphora, of early Imperial chronology. However, the connection of this amphora with the remains of the ship were not clarified in the excavation records. For this reason, the re-study of the finds has proven to be the only possible way to recover essential information about the alleged shipwreck, its actual dating, and the circumstances of its likely sailing route.

4.3. The Evidence for a Shipwreck

The hypothesis that some of the remains at the site of Nido del Cuervo belonged to a shipwreck, rather than an anchorage or a series of lost or jettisoned items, is supported by Pinedo’s succinct claim that wood from a hull had been retrieved together with fragments of its lead sheathing (Pinedo Reyes, 1996, p. 80). The results were never published in full, but it is important to stress that no remains of the cargo nor new lead ingots were found in connection with the wood remains. Among the items noted in the preliminary inventory of the excavation, there is a square bronze nail, a metallic hollow cylinder, and remains of the hull lead sheathing, confirming the claims that at least the remains of one ship were observed during the 1992 season (Pinedo, *ca.* 1992, AG-041, 132, 173). The only part of the possible wreck that has remained available for study is the archaeological materials that have been recovered in the area since the first intervention in 1977 and are now dispersed between the collections of the three different institutions noted above. The remains of Nido del Cuervo have gone unpublished for 50 years; this is the first time that all the materials of the site are presented.

5. The Lead Ingots

The early operations in 1977 allowed the recovery of a total of 15 lead ingots. Initially, eight were retrieved, all possible with the same stamp of Quintus Seius Postumus, and subsequently another seven: only one had a different number of panels on the back (Figure 4) (Mas García, *ca.* 1977b).

No systematic study has even been performed on this particular ensemble of lead ingots, one of the most characteristic exports of the 1st century BC western Mediterranean. It has not been possible to locate all 15 pieces,³ as only nine ingots from the site remain in public institutions, mainly at ARQVA, but also at the Museum of the Casa de la Moneda in Madrid (on loan) and the Archaeological Museum of Águilas

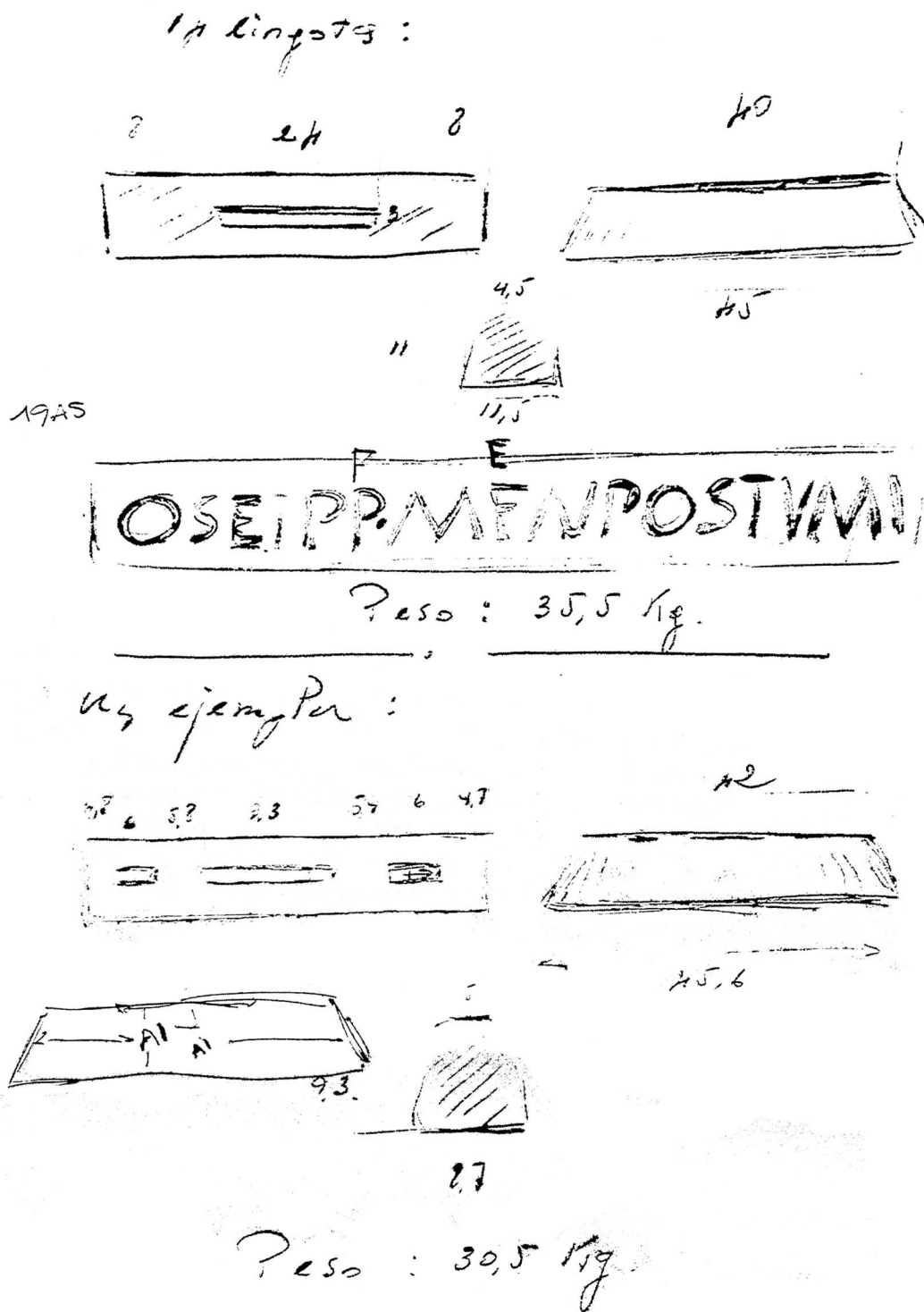


Figure 4. Original sketches by Julio Mas of the Postumus ingot (50196), included in a letter to Claude Domergue (Mas García, ca. 1977a)

(Table 1). We follow Domergue's (1990, p. 153; Domergue & Rico, 2023a, pp. 155–160) classification of Spanish lead ingots with a chronological sequence of four types. All the ingots studied are attributed to Type D1 ('Republican'), dating from the 1st century BC to the beginning of the Principate.⁴ They are characterised by a regular, elongated, and narrow shape and by a parabolic cross-section that can be more or less semi-circular or more or less acute, but

it may also form a sharper parabola whose two branches are oblique and rectilinear up to the point where they meet in an arc towards the top of the ingot (Domergue et al., 2023, pp. 155–160). This group includes three Sub-Types (D1A, D1B, and D1C), which are differentiated by the number of cartouches (one for Type D1A, two for D1B, and three for D1C). In the case of Nido del Cuervo, all except one belong to Type D1A.

Table 1. The lead ingots recovered at Nido del Cuervo.

ID	Museum	Type	Inscription	Ingot Height	Lower surface		Upper surface		Cartouche			Letters Height	Stamp
					Length	Width	Length	Width	No.	Length	Width		
50196	ARQVA	D1A	Q-SEI-P-F-MEN-POSTVMI	10.5	45	11	40	4.5	1	24	3	2	AI / AI
01523	Moneda	D1A	[---]OSTVMI	10.5	45.5	11	41	5	1	25	3	2	
00773	ARQVA	D1A	Illegible	9	44	9	39	4	1	24.5	4		
01521	ARQVA	D1A	Illegible	9	43	9	39	4.5	1	23.5	4		
01526	ARQVA	D1A	Illegible	8.5	43	8.5	39	4.5	1	24	3		
01527	ARQVA	D1A	Illegible	9	43	7	40	4	1	23.5	4		
50198	ARQVA	D1A	Illegible	8	45	9	41	4	1	9.5	2		
2/1/2001	Águilas	D1A	Illegible	9	43	10	41	5	1	23	3		
00742	ARQVA	D1C	anchor / L[---]CF / dolphin?	9	44.5	8	41	4	3	6 / 9 / 7	2	1.6	

5.1. The Postumus Ingots

At least two specimens belong to Type D1A, with a single central cartouche, and are characterised by a truncated conical shape with a rectangular and elongated base, resembling a truncated pyramid, and slightly rounded upper vertices. The bulk of the ingots each has a stamp referring to a Quintus Seius Postumus (*AE* 1983, 604; *HEp* 6, 667c) without any parallels in the archaeological record. However, only two examples have well-preserved inscriptions that can be read in full. The only ingot with a fully-preserved inscription (05196) is part of the permanent collection of ARQVA (Figure 5), while a second one is on loan at the Museum of the Casa de la Moneda in Madrid (01523) (Figure 6). The full inscription reads *Q(uinti) SEI P(ubli) F(ili) MEN(enia tribu) POSTVMI*. In the specimen preserved in Madrid, the inscription is heavily eroded and unreadable on the left due to corrosion caused by marine agents, though the last characters on the right are determinable: [---]OSTVMI. The similitudes between letters and disposition between the two inscriptions indicate they belonged to the same series and, more likely, the same casting mould.

The inscriptions attested on Republican lead ingots usually indicate the name of the individuals or *societates* that commissioned their manufacture, which, in most cases, coincide with the leaseholders of the mining operations (Domergue, 1990, pp. 253–277). In this case, the inscription, which is in genitive, reveals a full nomenclature composed of a *tria nomina*, filiation, and *gens*: ‘Quintus Seius Postumus, son of Publius, of the Menenia tribe’. The presence of both tribe and filiation reveals that Postumus was a Roman citizen.

The *cognomen* Postumus is not particularly popular in Spain (Abascal Palazón, 1994, p. 464). On the contrary, the *gens* Postumia is widely attested in Cartagena/*Carthago Nova* (Perea Yébenes, 2005; Ramallo Asensio, 2003, 2011, p. 125) and in Italy, where some Postumii and Postimii are occasionally recorded (Kajanto, 1965, pp. 295–296). However, it should be noted that the genitive form of the *cognomen* in the ingot can only correspond to a Postumus, rather than to a Postumius (gen. *Postumii*), which was a derived *nomen*. Based on prosopography, the Postumus in the ingots has been judged to be an agent who would have originated or operated from Campania (Abascal Palazón & Ramallo Asensio, 1997, pp. 60,



Figure 5. The ingot with the fully preserved inscription from Nido del Cuervo, ‘Q-SEI-P-F-MEN-POSTVMI’ (50196) (Carlotta Lucarini/Manuel Ángel Otero ARQVA).



Figure 6. The ingot with the partially preserved inscription, [—]OSTVMI (01523) (Carlotta Lucarini/ARQVA).

401–402; Bertrand, 1995, p. 76; Ramallo Asensio, 2003, p. 204).

The association that some authors (Deniaux, 2002, p. 38; Domergue, 1990; Domergue et al., 2023, p. 356; Domergue & Mas, 1983; Parker, 1992) have made between this Q. Seius Postumus and the homonymous knight allegedly poisoned by Clodius (Cic., *De Domo*, 115, 129; *Har.*, 30) is tempting but problematic. This association would result in a *tempus ante quem* for the shipwreck of 58 BC, the date Postumus was allegedly murdered in Rome because Clodius aspired to take his house on the Palatine. Although this identification finds strong support for the role of the equestrian order in the trade of southern Spanish metals, the ceramics recovered at the site poses a challenge to this possibility, for they date to after Clodius' death (*vid. infra*). If the Postumus in the ingots is considered a direct relative of the former, alternative explanations should be considered, such as their commercialisation after a period in storage – as exemplified by other wrecks (Rico, 2011), a possible continuation of the marks, or the existence of descendants with identical *tria nomina*. Certainly, a relationship between the *equus* mentioned by Cicero and the metal founder in the ingots cannot be discarded. If true, it would offer an important insight into the degree of involvement of the Roman elite in the extractive enterprises of southern Spain (Domergue, 1985, pp. 202–203).

Be as it may, the *gens* Seia has also been related to a family of merchants who operated from Campania, of possible Oscan origin (Frederiksen, 1959, p. 116), the most famous of which acquired Roman citizenship after the Social War (88 BC) (Bertrand, 1995, pp. 75–77; Domergue, 1990, p. 329; Ramallo Asensio, 2003, p. 204; Stefanile, 2017, pp. 307–309). The *tribus* Menenia seems to have been granted to the new citizens of several Campanian towns after the conflict,

and to Praeneste and Tibur (Stefanile, 2017, 2021; Taylor, 1960, pp. 43, 111–112), but it is rare in Spain and Cartagena/*Carthago Nova* (Wiegels, 1985, pp. 103–105). In Pompeii, the name of an A. Seius Gnostus appears inscribed in an alleged bronze – most likely, lead – pipe (CIL X 8071.54; Bertrand, 1995, n. 48). From the second half of the 2nd century BC, members of this *gens* seem to have been especially active in the trade surrounding Delos, as well as in Mauretania (Bertrand, 1995; Deniaux, 2002). On the contrary, the Seii are rather uncommon in Spain and mainly attested in the epigraphy of Cartagena and Tarragona (Abascal Palazón, 1994, p. 213; Díaz Ariño, 2008, pp. 288–289; Stefanile, 2017, pp. 307–309).

The Cartagena ingot (50196) includes two identical marks with the formula 'AI' (Figure 7), about 2 cm high. While the inscription on the panel, cast with a matrix of fired clay, must be related to the production process of the ingot, stamped marks are usually associated with a later stage of transportation or state control (Colls et al., 1986, p. 70; Díaz Ariño, 2006; Domergue, 1990, pp. 271–274, 1994; Domergue et al., 2023; Manacorda, 1993, p. 38). This type of stamp was uncommon in Republican ingots and became much more widespread during the Early Empire in association with increasing state control (Díaz Ariño & Antolinos Marín, 2013, p. 538; Domergue, 1990, pp. 271–272). Only seven specimens with stamped marks are dated to the Late Republican period other than the ones at Nido del Cuervo: Mal di Ventre C (75–50 BC) (Salvi, 1992, pp. 670–671), Scoglio Businco (1st century BC?) (Lo Schiavo & Boninu, 1986, p. 141), Las Amoladeras (50–30 BC) (Díaz Ariño, 2006; Sinner et al., 2020, pp. 146–147), one recovered in the waters of Cartagena (Domergue, 1990, p. 271), one in the waters of the Tiber, and one from Cartaromana Ischia (Domergue et al., 2023)



Figure 7. Detail of the two control marks on one of the sides of the fully preserved Postumus ingot (50196) (Carlotta Lucarini/ARQVA).

5.2. The Type D1A Ingots

The bulk of the ingots (00733, 01521, 01526, 01527, 50198, and MAMAG1-2-2001) can be attributed to Type D1A. They present a single cartouche on the narrowest side, in which no traces of the inscription have been preserved (Figure 8). The only recent recovery of this type occurred in 2001, when an ingot (MAMAG1-2-2001) was donated to the Archaeological Museum of Águilas, suggesting that many more were looted from the site and are currently in private hands. All of the

examples are highly corroded, and the lead has disintegrated at various points, giving the ingots an irregular shape. The parts most affected by deterioration are the corners and the interior of the cartouches, of which no traces of the original inscriptions remain.

Most of the ingots (00733, 01521, 01526, and 01527) exhibit very similar characteristics. They all have a truncated cross-section with a rectangular and elongated base, trapezoidal section and slightly rounded upper vertices. Based on metrical similarity with the ingots whose inscriptions have been preserved, it is fair to



Figure 8. The Type D1A lead ingots from Nido del Cuervo whose inscriptions have eroded: 1. Águilas Museum 01/02/2001, 2. 01521, 3. 01526, 4. 01527, 5. 00733, 6. 50198 (Carlotta Lucarini/ARQVA).

think all are of the Postumus series. In any case, uniformity in sizes was essential for piling and it cannot be ruled out these belong to another producer.

Only one ingot (50198) deviates from the general typology. The size of the panel is considerably shorter, and its cross-section is semicircular rather than truncated. The significant difference in the cartouche size (9.5 to an average of 24 cm) prevents it from being related to the other ingots. The one stored in Águilas (MAMAG 1-2-2001) has a convex shape, slightly more curved on the upper vertices than the others and a morphology similar to other ingots (00742 and 50198), probably originating from a different mould.

An ingot with the inscription 'L.LVCRETI.L.F.[—]C.M.[—]F' at the Casa de la Moneda has been published as belonging to the wreck (Domergue & Rico, 2023b, p. 488). However, after further consultation, the ingot appears to have been retrieved from the Sierra de la Unión, the mining sector east of Cartagena, although there are doubts about this attribution.

5.3. The Type D1C Ingot

Only one ingot belonging to Domergue's Type D1C has been preserved (00742) (Figure 9). It has a trapezoidal longitudinal section and a parabolic transverse section, giving it a rather semicircular shape. On the back, there are three cartouches of different sizes. All

cartouches are heavily eroded, and only the design on the left panel is clearly recognisable now: it is a lead anchor, a fairly typical symbol of this type of ingot. It includes two typical V-shaped arms and a rectangular stock, as well as a circular cable-ring. The central cartouche can only be read partially since most of the surface has eroded, but it appears to include a shortened nomenclature and filiation. The first letter of the inscription is most likely an 'L', followed by three possible letters, while the last two, preserved only in their lower half, can be confidently restored to a 'C' and an 'F', separated by an interpunct. The latter can be read as 'C(aii) F(ili)' (i.e. son of Gaius). The first letter of the epigraph may belong to the *praenomen* Lucius. Because there is space for more than two characters in the non-extant section of the cartouche, it is most likely it included a *nomen* rather than a shorted *nomen* and *cognomen*. As with the Postumus ingots, this inscription was commissioned by a *privatus* rather than a *societas*. The last cartouche seems to have held the representation of a dolphin, as it is common in this type of ingot (Domergue & Rico, 2023b, p. 488).

Lastly, the alleged connection of this ingot with others found in the Cartagena area with the inscription 'Q. AQVINI', as some letters from Mas' archive suggest, seems to have no basis (Mas García, ca. 1977b; for the inscription, see Domergue et al., 2023,

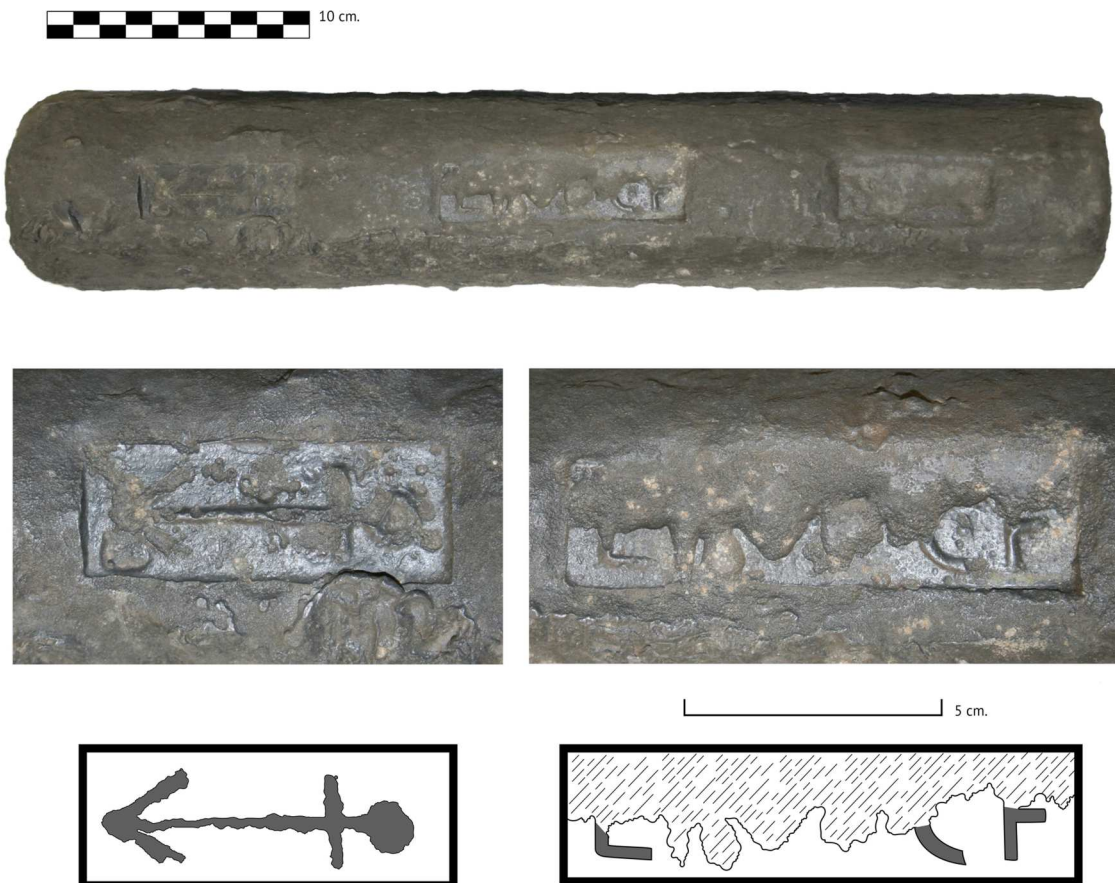


Figure 9. The D1C lead ingot with a partially eroded inscription: anchor / L[—]CF / dolphin? (00742) (Carlotta Lucarini/ARQVA).

pp. 300–303). Although these bear the same number of cartouches, and there is an anchor on one of the sides, other elements exclude their belonging to the same series: the difference in the measurements of the central panel (13 cm for Aquini and 9 cm for Nido del Cuervo) and the discrepancy between the letters in the inscriptions, as well as the different position of the anchor. The ingot with three panels from Nido del Cuervo is, in fact, the only attested specimen in which the anchor stamp appears on the first label, before the onomastic inscription.

5.4. Weight

Based on the measurements, the approximate weight of each piece has been extracted, considering the specific weight of lead. This analysis supports that the ingots whose inscriptions are not legible do not belong to the same series. Excluding the two ingots with different labels (00742 and 50198, both around 25 kg), the other uninscribed ingots have a weight ranging between 22 and 32 kg, in any case, lower than the two Postumus stamped ones, which weigh around 35 kg. Most ingots, therefore, weigh close to the usual unit of 100 Roman pounds (32.750 kg) (Domergue & Liou, 1997; Domergue & Rico, 2023a, p. 156). These differences may be due to alterations in the manufacturing process or the high degree of corrosion to which the materials have been subjected, although the ingots might not constitute a homogenous body and that the ship might have carried ingots from different producers.

5.5. Origin of the Lead

The origin of the lead of the ingots was first proposed to be the Sierra Almagrera (Domergue & Mas García, 1983, p. 907) or the Cabezo Minado del Charcón, northeast of Águilas (Ramallo Asensio & Berrocal, 1994, p. 120). However, subsequent isotope analysis of ingot 50196 at ARQVA indicated that the lead most likely originated from the Sierra de Cartagena or Mazarrón (Trincherini et al., 2009). More recently, the origin of the same ingots has been reconsidered to a broader area, suggesting southeastern Spain, with equal possibilities of originating from Mazarrón and Sierra Almagrera (Domergue et al., 2023, p. 356; Palero et al., 2023, p. 194).

A recent stable isotope analysis, sampling all the ingots for the first time (except 01523, stored in Madrid), seems to suggest that the raw metal originated in the vicinity of Mazarrón and a shared origin of all the specimens (Rothenhöfer et al., *in press*). Ingot 01523 most likely belonged to the same series and smelting centre as specimen 50196, as suggested by morphology, measurements, and inscription.

The galena deposits in the districts of Águilas, such as Lomo de Bas, have not undergone significant geological surveys, and therefore it is difficult to discriminate an origin in Águilas or Mazarrón. It is plausible that the ore was extracted near Águilas itself, and the ingots were subsequently manufactured in one of the production centres in Águilas, potentially being directly marketed from there. Be as it may, along the coast of Mazarrón to the ancient town of Águilas, several small lead-producing centres have been documented (Palacios Morales, 1982). The most relevant of these, Pocio Huertas, dates to a short time interval of operation, between *ca.* 60–25 BC, coinciding with some of the pottery identified from the Nido del Cuervo site.⁵

6. The Ceramics

When the site was initially discovered, it was reported that several Italian Dressel 1C amphorae were found alongside the ingots; however, no drawings were published, and their quantity was not documented (Domergue & Mas García, 1983). In later surveys, several amphorae were recovered, although only the latter type was specifically mentioned (Pinedo Reyes, 1996, p. 80). Other scholars later suggested that the alleged wreck also carried an amphora identified as a Dressel 28 type (Mas García, 2004, pp. 67–68; Parker, 1992, p. 213; Pérez Bonet, 2008, p. 25). The ceramics retrieved during the 1977 and 1992 seasons are currently stored in the collections of ARQVA. While there is no original catalogue of J. Mas' excavations, we have been able to locate the inventory from the 1992 season. Additionally, in 2023, an Italian Dressel 1C amphora was retrieved in a rescue excavation north of the site (J. de D. Hernández, pers. comm., 3 October, 2023). It was not possible to directly associate this amphora with the Nido del Cuervo site or any other possible wreck.

The original rescue excavation conducted by J. Mas in 1977 included a total of 16 fragmented vessels (Table 2). It is unclear where specifically these fragments were retrieved, although Mas (1980, p. 256) implied that they were found in proximity to the lead ingots. However, it is important to note that this proximity does not necessarily indicate that they belonged to the cargo of the wreck; rather, they were possibly the most noticeable surface finds that were collected during the excavation.

The majority of the preserved sherds (14) belong to amphorae, with the exception of a fragment of a common ware, which could belong to a basin or a possible chamber pot, and a very deteriorated amphora stopper made of *puzzolana*, possibly from a Late Republican amphora. Remarkably, although most amphorae were considered to be Dressel 1C, only one fragment can be undoubtedly attributed to this type. The

Table 2. Ceramics recovered in 1977 stored in ARQVA.

ID	Class	Provenance	Type	Date	Shape	Observations	Figure
32089	Amphora stopper	Campania	Puzzolana, from a Dressel 1?	150–51 BC	Stopper	Heavily damaged	
1468	Italian amphora	Latium-Campania?	Dressel 1C	120–50 BC	Rim, neck, handle		10.1
15859/2	Baetican amphora	Algeciras or Málaga?	Ovoid?	70 BC–AD 20	Neck, handle		
1454	Baetican amphora	Algeciras or Málaga?	Dressel 12	50 BC–AD 100	Body		10.2
15858/2	Baetican amphora	Algeciras or Málaga?	Dressel 12	50 BC–AD 100	Neck, handle		
1498	Baetican amphora	Algeciras?	Ovoid or Dressel 12?	50 BC–AD 1	Rim, neck, handle	Probably the amphora referred by Mas as Dressel 28	10.3
1499/2	Baetican amphora	Baetica	Dressel 12?	50 BC–AD 100	Base	Pitched in the bottom	
32088	Italian amphora	Latium-Campania?	Dressel 2-4	70 BC–AD 100	Handle		10.4
2140	Common ware	Cartagena?	Basin or chamber pot	AD 150–250	Base	Cfr. Quevedo 2015, p. 125, fig. 79	
15928/2141	Gaulish amphora	Narbonensis	Gauloise 4	AD 150–250	Base	Cfr. Delbey et al. 2015, p. 188, fig. 3.7	
15926	African amphora	Nabeul/Neapolis	Africana 2A	AD 175–300	Base	Cfr. Bonifay 2004, pp. 107–109, figs. 57–58	10.5
32065/1	African amphora	Nabeul/Neapolis	Africana 2	AD 175–300	Handle		10.6
15925	African amphora	Africa Proconsularis	Africana 3A / Keay 25 sub-type 1?	AD 300–400	Base	Cfr. Bonifay 2004, p. 118, fig. 63	10.7
1499/1	African amphora	Africa Proconsularis	Africana 3A / Keay 25 sub-type 1	AD 300–400	Neck, handle	Cfr. Bonifay 2004, p. 118, fig. 63	
2138	Carthaginensis amphora	El Mojón	Almagro 51C	AD 350–450	Rim, neck, handle	Cfr. Berrocal 2012, p. 263, fig. 7	10.8
2142	Carthaginensis amphora	El Mojón	Almagro 51C	AD 350–450	Base		
4054/1	Carthaginensis amphora	El Mojón	Mojón 1B	AD 350–450	Neck, handle	Cfr. Quevedo and Berrocal 2022, p. 84, fig. 7.23	10.9
15927	Carthaginensis amphora	El Mojón	Spatheion	AD 350–450	Body		10.10

Dressel 1C, which preserves both handles and the neck, seems to be of Latial or Campanian origin, rather than Baetican, suggesting a dating in the first half of the 1st century BC (Figure 10.1). In contrast, the other fragments that had been considered to be Dressel 1C types seem to rather belong to a local successor of Dressel 1C, the Dressel 12 amphora. At least three to four sherds, all with possible Málaga fabrics, present morphologies more consistent with Dressel 12 or the Titan amphorae, an earlier variant of this amphora (Quillon & Capelli, 2016) (Figure 10.2). While there is variation in morphology, one amphora including rim, neck, and handles might belong to a particular Ovoid amphora or an early variant of a Dressel 12, and its fabric points to the workshops of Algeciras, in the Strait of Gibraltar (Figure 10.3). These amphorae were produced from the mid-1st century BC to the late 1st century AD, with some derived types still being produced *ca.* AD 200 and appear to have carried high-quality fish sauce (Bertoldi, 2012, p. 50; González Cesteros, 2012; Mayet, 1999; Quillon, 2016, pp. 139–173). Additionally, Mas also retrieved the base of a flat-based imperial container and a single fragment of a geminated handle from a Campanian Dressel 2–4 (*ca.* 70 BC–AD 100) (Figure 10.4).

Although the Republican amphorae are concentrated in the 1st century BC, there is no consistent chronology among the rest of the sherds. Most of

the ensemble belongs to a Late Antique horizon (2nd–5th century AD) that had not been documented on the site before. This period is well represented by several imported vessels. One of the earliest is the bottom of a Gauloise 4 wine amphora, dated to the 2nd–3rd centuries AD and previously documented on the Cartagenan coast (Delbey et al., 2015, fig. 3.7). The majority of vessels are African amphorae, including a bottom and a handle of an Africana II (Figure 10.5, 6) dated to the 2nd–3rd century AD and a neck and a bottom that could belong to an Africana III A / Keay 25, subtype 1 (Figure 10.7), dated to the 4th century AD (Bonifay, 2004, pp. 119–122). The remaining fragments belong to regional amphorae from the El Mojón workshop: a neck of an Almagro 51c amphora (Figure 10.8), a very deteriorated bottom and a neck of Type Mojón 1B (Figure 10.9); an imitation of the African Keay 25), dated between the 4th and 5th centuries AD (Quevedo & Berrocal, 2022) and a *spatheion* from the same workshop (without excluding a local production from Águilas) (Hernández García & Pujante Martínez, 1999; Quevedo, 2021; Ramallo Asensio, 1984, 1986) (Figure 10.10).

During the 1992 season, according to the excavation report, 46 ceramic fragments were recovered from an extensive area that also included some pottery found on the western side of Hornillo Bay (Pinedo Reyes, *ca.* 1992). Of these, 19 were stored in ARQVA and have been able to be studied (Table 3).



Figure 10. Ceramics recovered by Julio Mas in 1977: 1. Italian Dressel 1C amphora, 2. Southern Spanish Dressel 12 amphora, 3. Southern Spanish Ovoid amphora, 4. Italian Dressel 2–4 amphora, 5. Africana 2A amphora, 6. Africana 2 amphora, 7. Africana 3A amphora, 8. Southern Spanish Almagro 51C amphora, 9. Southern Spanish Mojón 1B amphora, 10. Southern Spanish *spatheion* (Carlotta Lucarini and Joel Bellviure/ARQVA).

The pottery retrieved during this season differs substantially from Mas' exploration of the site, with little to no clear Late Antique amphorae. A triangular handle with a possible local Cartagena fabric might be assignable to an Escombreras (also known as Escolletes) type amphora (Figure 11.1), whose chronology,

High Imperial or Late Roman, remains a subject of debate (Quevedo, 2021, pp. 200–202, fig. 5). The bulk of the pottery recovered, around 11 examples, except for a stopper cut from the wall of a Baetican amphora (Figure 11.2), belong to flat handles and flat-based bottoms of an undeterminable type, perhaps

Table 3. Ceramics recovered in 1992 stored in ARQVA.

ID	Class	Provenance	Type	Date	Shape	Observations	Figure
AG-134	Carthaginensis amphora	Cartagena?	Escombreras	AD 1–450?	Handle	Cfr. Quevedo 2021, pp. 200–202, fig. 5	11.1
AG-120	Baetican amphora	Cádiz	Dressel 7-11	20 BC–AD 100	Neck	Pitched	
AG-058	Baetican amphora	Guadalquivir	Stopper	AD 1–100	Sherd	Cut and reused as stopper	11.2
AG-123	Baetican amphora?	Baetica?	Ovoid?	Undetermined	Neck, handle		
AG-056	Baetican amphora?	Baetica?	Undetermined	Undetermined	Handle	Central channel	
AG-114	Baetican amphora?	Baetica?	Undetermined	Undetermined	Handle	Central channel	11.7
AG-117	Baetican amphora?	Baetica?	Undetermined	Undetermined	Handle	Central channel	11.8
AG-122	Undetermined amphora	Undetermined	Flat-bottomed?	AD 1–450	Base	Pitched and fish-bone remains	11.3
AG-130	Undetermined amphora	Undetermined	Flat-bottomed?	AD 1–450	Base	Pitched and fish-bone remains	
AG-046	Undetermined amphora	Undetermined	Flat-bottomed?	AD 1–450	Base	Pitched	
AG-124	Undetermined amphora	Narbonensis?	Flat-bottomed?	AD 1–450	Base	Pitched	
AG-126	Undetermined amphora	Narbonensis?	Flat-bottomed?	AD 1–450	Base	Pitched	
AG-129	Undetermined amphora	Narbonensis?	Flat-bottomed?	AD 1–450	Base	Pitched	
AG-062	Undetermined amphora	Narbonensis?	Flat-bottomed?	AD 1–450	Base		
AG-112	Undetermined amphora	Narbonensis?	Flat-bottomed?	AD 1–450	Handle		11.4
AG-044	Undetermined amphora	Narbonensis?	Flat-bottomed?	AD 1–450	Handle		
AG-048	Undetermined amphora	Narbonensis?	Flat-bottomed?	AD 1–450	Handle		11.5
AG-118	Undetermined amphora	Narbonensis?	Flat-bottomed?	AD 1–450	Handle		11.6
AG-059	Glazed earthenware	Undetermined	Jug	AD 1800–present	Rim		11.9

from southern France or Lyon (Figure 11.3–6). The handles are elongated, originally about 20 cm in height, with a small central channel. The clay is well-sieved and yellowish-brown in colour (7.5YR 7/6), with a slightly darker matrix (2.5YR 4/6), with little to no temper at all. Most of their bases are pitched on the inside, and some include fish bone remains (Figure 11.3). The only exceptions are constituted by the handles of possible Ovoid or Haltern 70 amphora (Figure 11.7–8), and the neck of a Baetican fish-sauce amphora, perhaps a Dressel 12 or Dressel 7–11. Finally, a stepped rim seems to belong to a modern glazed earthenware jug (Figure 11.9).

In the original interpretation of the cargo from the alleged wreck, it is possible that Baetican Dressel 12 amphorae were mistaken for Italian Dressel 1C, of which they are direct successors (Figure 2.4). This interpretation is supported by three photographs depicting Dressel 12 taken in Águilas by Julio Mas, found in his personal archive (Figure 12) and by recent donations to the Archaeological Museum of Águilas of this very same type of amphora, recovered in an indeterminate area of the coast of Águilas (Quevedo et al., 2024b, p. 161, fig. 11.4). The Dressel 28 amphorae pose a more difficult challenge as, if they were thought to be the flat-bottomed amphorae recovered in considerable numbers from the 1992 season, Pinedo (1996) did not make note of them. On the contrary, it was Mas García (2004) who seems to have passed the information to Parker (1992). The amphorae that Mas interpreted as Dressel 28 could have been Baetican Ovoid amphorae instead. Precisely, a drawing by the author depicting an Ovoid 1 was found in his personal archives, together with documentation from Águilas (Figure 13) (Mas García, ca. 1975). (However, other drawings found in the same folder, including one of a Dressel 12, were later found to have originated from the Cartagena harbour.) The type is present among the materials stored

in the museum and is well-documented in Águilas and its hinterland as well. A recent discovery in the harbour of the town includes the upper body of one of these containers, potentially originating from Málaga/Malaca (Sáez Romero et al., 2024) (Figure 2.3).

Additionally, the quantification of the pottery stored in the museum confirms a particular commercial dynamic in Hornillo Bay that had already been suspected during the 2022 survey season (Quevedo et al., 2024b). The predominance of Late Antique pottery in the site goes accordingly to the higher frequentation of the bay from the 4th–5th centuries onwards, coinciding with the settlement of Isla del Fraile (Quevedo et al., 2024a). However, the presence of a Late Antique shipwreck overlapping the Republican wreck should be completely discarded, as there is a notable variation in origins and types and, most notably, none of the types are chronologically compatible with the others. The data collated from the underwater survey seasons in 1975, 1977, 1992, and 2021 suggest an exceptional impact of maritime navigation in the bay during the 1st century BC. The Early Imperial Period, poorly represented in the area, is followed by a distinct resurgence observed in the 4th and 5th centuries AD, although by ceramics that were most likely jettisoned or lost during transport (Figure 14).

7. The Anchors

In 2007, a lead anchor stock was donated to the Archaeological Museum of Águilas (Cat. no. MAMAG 3-3-2007). It had been recovered by a diver in the vicinity of the site, partly hidden beneath a large rock. During the extraction process, it was broken in two. The stock was made using a mould casting technique, the same method used for making the lead ingots. The anchor features two arms and a squared

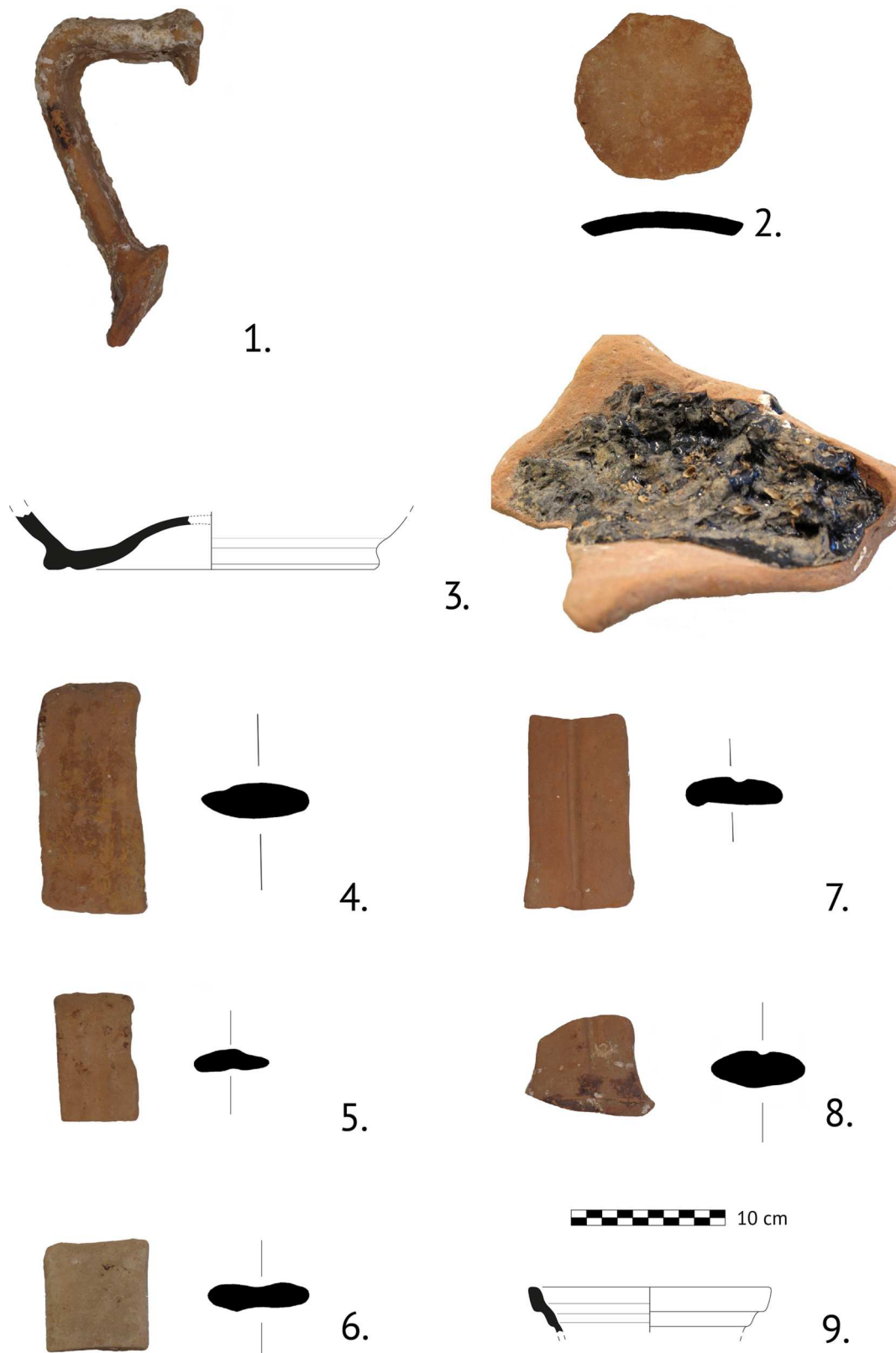


Figure 11. Pottery recovered in 1992: 1. Southern Spanish Escombreras type amphora, 2. Southern Spanish amphora stopper, 3. Flat-bottomed fish sauce amphora base with traces of pitch and fish remains, 4–6. Flat-bottomed amphorae, 7–8. Southern Spanish Ovoid amphorae, 9. Modern glazed earthenware (Carlotta Lucarini and Joel Bellviure/ARQVA).

central hollow box. The transversal tenon that should have been housed in the centre of the box has not been preserved, but traces of the breaking points of the rod remain on the inner walls, which were cast during the manufacturing process. It measures 55 cm in length

and 9 cm in height; the width of the arms spans from 5 to 3 cm, and it weighs around 10 kg (Figure 15.1). There are no traces of inscriptions or stamps indicating the name of the owner, the metal founder, or the deities to whom anchors were often

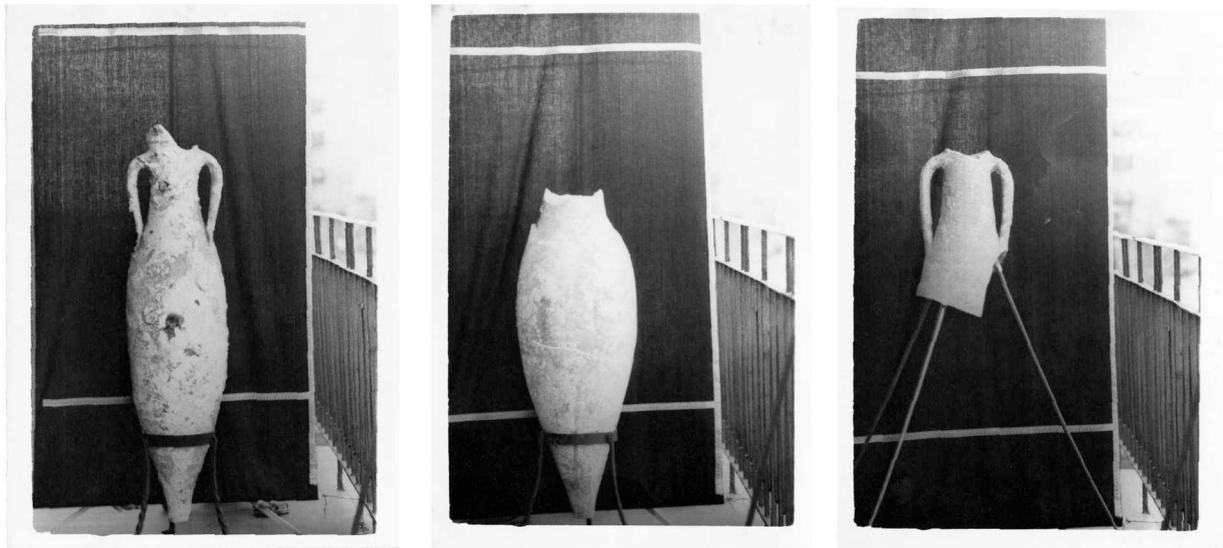


Figure 12. Three Southern Spanish Dressel 12 amphorae photographed by Julio Mas in the 1970s in Águilas, probably from Nido del Cuervo or a personal collection (Fondo Julio Mas. ARQVA).

dedicated. In 2009, a different lead stock which had been reportedly retrieved from Hornillo Bay was donated to the same museum. It weighed 13.7 kg and was 69 cm in length and of the identical type to the one from Nido del Cuervo, but its relationship with the site is more uncertain (Quevedo et al., 2024b, p. 161, fig. 11.1) (Figure 15.2).

The use of wooden anchors with lead stocks was standard in the Roman Period. The earliest example has been radiocarbon-dated to the late 5th–4th century BC (Alves et al., 1989, pp. 130–131), although they became most popular between the 2nd century BC and the 1st century AD (Gianfrotta, 1980; Haldane, 1985; Medas, 2005). The stock, the upper end of a lead anchor, is the part that is most often preserved and recovered in maritime contexts. Lead, in turn, is less prone to corrosion and concretion caused by the underwater environment, unlike the organic components (i.e., wood and fibres) that constitute the shaft of the anchor, which are seldom preserved. Throughout the Roman Period, lead anchor stocks did not undergo a significant typological evolution, hindering their dating outside closed archaeological contexts. Based on the morphology of the central tenon used to join the stock to the shank, the lead anchors from the Archaeological Museum of Águilas can be attributed to Kapitän's Type 3c and Haldane's Type 3b, which are roughly dated between the 3rd century BC and the 3rd century AD (Haldane, 1985; Kapitän, 1984, p. 38).

Numerous Mediterranean shipwrecks, as well as iconographical evidence, testify that Roman commercial vessels had multiple anchors of varied dimensions and weights, used for different purposes and manoeuvres. It is estimated that ships from the Greek and Roman periods would usually carry between five and ten anchors (Beltrame, 2002, p. 18;

Casson, 1971, pp. 255–256), although three are usually depicted on the bulwarks of medium-sized vessels in Roman reliefs (e. g. Basch 1987, pp. 457–476). The anchor in the Museum of Águilas is of notably small size; a similar parallel in the Madrague de Giens has been interpreted as belonging to the ship's boat (Liou & Pomey, 1985, p. 567; Parker, 1992, p. 250). Although its association with the Nido del Cuervo site is more than possible, the stock could also have belonged to a different ship which had to jettison one of its anchors.

8. Discussion: A Shipwreck at Nido del Cuervo?

After analysing the remains discovered at the site at Nido del Cuervo, the only material culture that seems to belong to a shipwreck is the existence of a concentration of lead ingots at the site. The important number of ingots leaves no doubt that they sank within a ship and that they were commercial cargo, not raw material for on-site repairs. The weight and concentration of these products make it implausible that they were jettisoned items. Overall, the understanding of the nature of the ship is constrained by extremely limited evidence. However, it is clear a ship sank on the site, judging from the recovery of lead sheathing and iron nails, although it is not equally clear if the ingots belonged to this specific vessel (Pinedo Reyes, ca. 1992).

The chronology of the recovered lead ingots (Domergue's Types D1A and D1C) suggests a dating of at least one of the contexts within the Late Republican Period, as originally proposed, and now supported by the ceramics from the two short excavations conducted at the site, if they belonged to the same ensemble. If we consider that the other

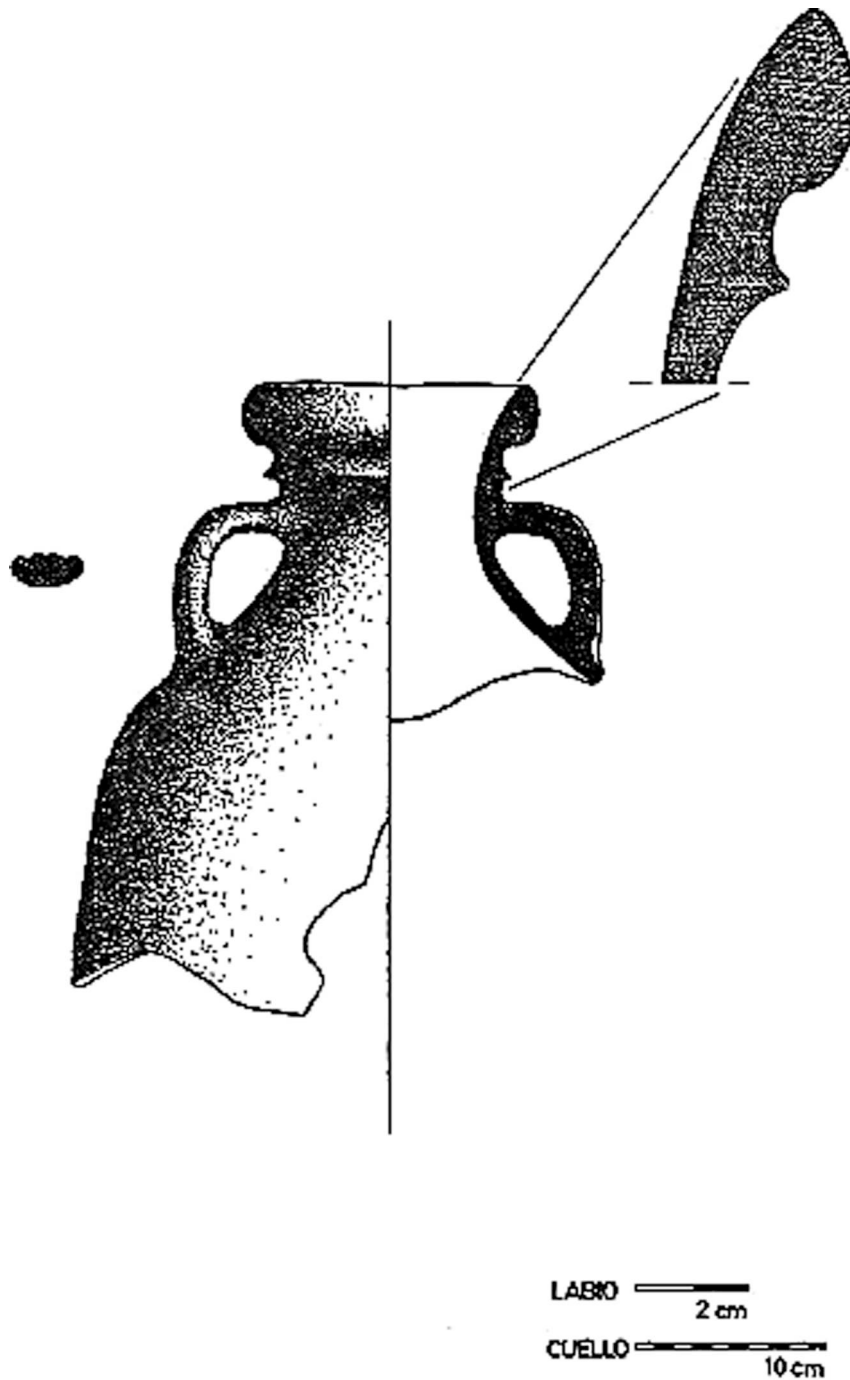


Figure 13. Drawing of an Ovoid 1 amphora, allegedly recovered by Julio Mas from Águilas or Nido del Cuervo (Mas García, *ca.* 1975).

material culture recovered at the site complemented a cargo of lead ingots, then two chronological possibilities emerge: the 1st century BC and the Late Roman Period. The latter can be quickly discarded as anachronistic for the lead ingots, and the Late Roman pottery recovered at the site shows much temporal variation. It is clear from the chronological disparity of the Late Roman ceramic types that they were all items lost in different periods, and there is no sound evidence to determine the presence of a Late Antique wreck. The only plausible option for a cargo that accompanied the ingots is that of a series of Late Republican amphorae that do chronologically overlap

and, therefore, might have been lost at the same time as the lead ingot cargo. However, there are two further possibilities concerning the Republican amphorae from the site: one that favours a possible connection with Dressel 1C, as Mas reported, and another that takes into account the new evidence. The relation of these amphorae with the ingots and the remains of the hull is still unclear, and a third possibility might be that none are related to each other, although we argue that it is more likely that at least one part of the amphorae finds are related to the lead ingots.

The traditional interpretation posits a relation between the ingots and Dressel 1C amphorae. The

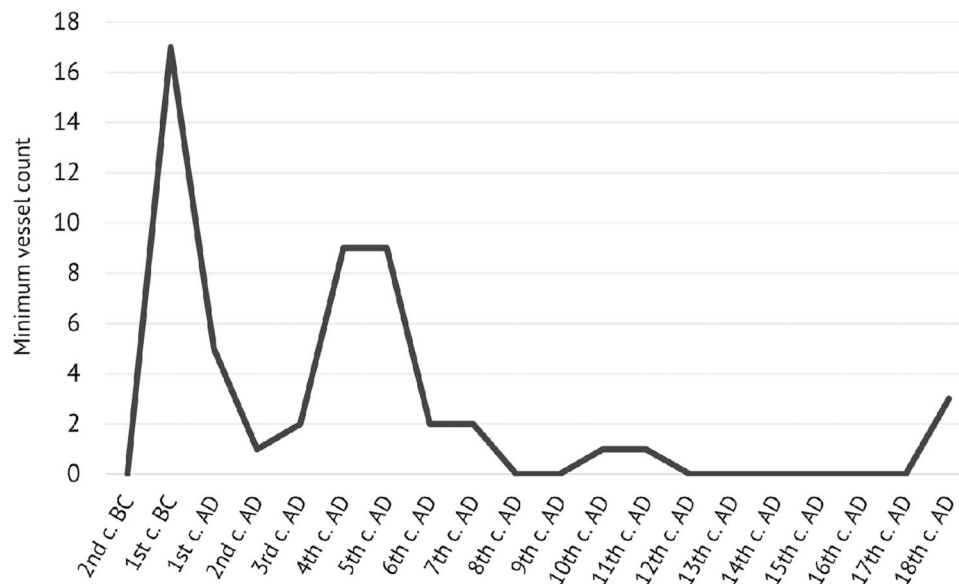


Figure 14. Line graph illustrating the diachronic distribution of ceramics recovered in Hornillo Bay. Note the two significant concentrations in the 1st century BC and the 4th and 5th centuries AD, likely revealing the time of maximum frequentation of the area. (Authors)

presence of Campanian Dressel 1C amphorae in the waters surrounding the wreck has been attested to some extent, and the chronology of the type – mostly concentrated between 100–50 BC – coincides with the *floruit* of Cicero’s Quintus Seius Postumus in 58 BC. Yet, due to the dating of the type to the early 1st century BC, no other shipwrecks have yielded a cargo of both Dressel 1C amphorae and Spanish lead ingots. This is crucial because, if the ship transported Campanian amphorae, it would reveal an early redistribution pattern of ingots from Cartagena/*Carthago Nova* southwest to the Strait of Gibraltar area, emerging around the end of the first quarter of the 1st century BC. Certainly, a ship laden with Dressel 1C amphorae in notable quantities – unlikely to belong to the crew – could have originated from the Bay of Naples heading to Cartagena/*Carthago Nova*. Stowing lead ingots in another southern Spanish *emporium* seems unusual, not just due to the challenges of stowing an existing cargo but also because the logical step would be to sell Italian merchandise in Cartagena/*Carthago Nova* and onload new products instead. The possibility of

the Nido del Cuervo site including an early 1st-century merchantman originating from the Italic Peninsula engaged in redistribution provincial trade appears rather unrealistic.

The second option to be considered after analysing the site’s documentation introduces a slight chronological alteration but reveals a drastic difference in the nature of the trade. If we take into account the exceptional distribution of Dressel 12 amphorae in Águilas and at the site itself, there arises the possibility that what J. Mas observed in 1977 – ostensibly, in some sort of connection with the ingots – that, in fact, these amphorae are Dressel 12 rather than Dressel 1C types. This possibility significantly renovates the commercial context of the enterprise. A ship carrying lead ingots redistributed alongside fish sauce or olive oil amphorae in their cargoes constitute the sheer majority of lead ingot carrying wrecks, most of which headed toward Ostia or Campania (Cerezo Andreo, 2015; Domergue & Rico, 2014; Rico & Domergue, 2016). However, the potential Nido del Cuervo wreck presents another challenge, since the



Figure 15. Lead anchor stocks recovered in Hornillo Bay: 1. Anchor allegedly recovered near Nido del Cuervo, 2. Anchor recovered west of Isla del Fraile (Alejandro Quevedo/Águilas Archaeological Museum).

origin of the lead ingots has been considered to be around Mazarrón, northeast of the site. This seems to exclude any option that does not consider provincial redistribution but opens the door to a debate on various possibilities:

- a) The lead ingots were redistributed eastwards. In this case, the ship was likely stowed in Málaga/*Malaca* with a cargo of Dressel 12 and perhaps Ovoid amphorae and, in the same *emporium*, with lead ingots that had arrived in a previous trip. The vessel was now ready to distribute these toward Cartagena/*Carthago Nova* or Rome alongside some amphorae.
- b) The amphorae were redistributed eastwards. For this case to be feasible, the lead ingots must have been stowed in Águilas, about 3 km south of the site, or in a safe anchorage, together with the amphorae which had arrived during a previous redistribution trip. A transfer in Hornillo Bay appears impractical, as there would be serious ballast issues by adding heavy cargo to an already existing one. The area is also specifically unfit for transfer operations.
- c) Both the lead ingots and the amphorae were redistributed westwards, towards *Baetica* (Cerezo Andreo, 2015, p. 185; Domergue et al., 2023, p. 356). In this scenario, the ship would have travelled south, with both amphorae and lead ingots loaded in Cartagena/*Carthago Nova*. This option seems less feasible since most late 1st-century amphorae on the site appear to have very similar fabrics and to have originated from the same area, probably Málaga/*Malaca*. The redistribution of Dressel 12 amphorae to their same area of production is also unrealistic.

The first option stands as the most realistic, as far as we consider that any of the pottery recovered under water belonged to the possible wreck. A small-capacity merchantman seems fitting based on the evidence reviewed. Judging from the ceramics studied, the goods carried alongside the ingots might have been a mixed cargo of lead ingots together with Dressel 12 and Ovoid 1 amphorae from Málaga/*Malaca*. It is possible, although not highly likely, that a fragment of a wine Italian Dressel 2–4 amphora – the only other amphora type coetaneous to the former – belonged to the crew. This interpretation assumes that the cargo originated from the vicinity of Águilas or Mazarrón, where the metal would have been transformed into ingots and may have been transported to a major redistributing centre, most likely Cartagena/*Carthago Nova*. From there, it could have been transported directly to its destination or loaded onto a larger freighter heading to Latium or Campania.

9. Conclusions

The Nido del Cuervo site has long been understood to be a homogenous shipwreck dating to the mid-1st century BC. However, a reanalysis of the archaeological materials that were found near the lead ingots has revealed that the nature of the site was much more heterogeneous, encompassing pottery from the 1st century BC to the 7th century AD. After analysing the remains of the site that have been preserved, it has been noted that a concentration of ceramics seems to match the date of the lead ingots, while several Late Roman fragments seem to belong to items jettisoned or lost during activities in the bay during the 4th–7th centuries AD. Concerning the amphorae that might have accompanied the ingots, two options have been weighed. The options suggested by Mas is that the cargo was complemented with Italian wine Dressel 1C amphorae. However, based on the dating of other lead ingot carrying wrecks after the popularisation of the Dressel 1C amphora type, we suggest that if any amphorae ought to be related to the ingots, it must be Baetican fish sauce Dressel 12 amphorae. The latter seems to be the most viable option based on chronology and number, revealing new aspects of the redistribution of lead ingots during the Late Republican Period. It would also suggest a dating of the wreck to around 50–20 BC.

This possible interpretation, if correct, would suggest an interesting trade route, although this relies on the assumption that the amphorae belonged to a single wreck, as suggested by the original excavators in 1977. Whether it was paired with fish sauce containers or not, the lead of the ingots appears to have originated from Águilas or Mazarrón, and this suggests a yet unnoticed indicator that the lead was stowed in a redistribution port. Depending on the possibilities, this port could have been Málaga/*Malaca*, or Cartagena/*Carthago Nova*, if none of the other options presented here are preferred. In any case, it seems unlikely that the lead would have been commercially distributed to its final destination directly from its immediate production area, Mazarrón or Águilas. Instead, the lead, already transformed into ingots, would have been transported to major *emporium* to be stowed alongside other cargoes. This would ensure the commercial viability of the enterprise and would reduce the risk of other incidents like the Mal di Ventre wreck, whose sunk cargo of about 1,000 lead ingots must have been particularly detrimental for its owner, probably both the producer and *navicularius* (Salvi, 1992).

In light of the new evidence, the arguments of Mas' initial hypothesis that the ingots were carried alongside Dressel 1C amphorae seems now unlikely. If this were the case, the ship would have been heading south from Italy, intended to supply a short-distance provincial market rather than the more common

destination of the lead trade, Italy. Mas' original interpretation is at odds with our knowledge of 1st-century BC maritime trade in southern Spain.

The re-examination of the Nido del Cuervo 'wreck' has proven to be a revealing example of the consequences of incomplete excavation and publishing practices of underwater sites, which eventually may lead to their disappearance from the archaeological record. Our knowledge of the site has been limited to the re-study of few of its remains, as well as oral and archival references. Despite these challenges, the reanalysis of materials available at museums and other public institutions has enabled the recovery of vital information, as well as the challenging of the traditional reading of the wreck, shedding more light on the nature of the maritime trade of the very Late Republican Period in the western Mediterranean.

Note

1. The site could be located in September 2024 by J. Rodríguez Pandozi and E. Aragón during an underwater survey part of the Isla del Fraile Project, shortly before this article was published. Preliminary analysis on the remains found a concentration of Late Roman pottery and a rim of a Dressel 12 amphora, confirming the suspicions presented in this preliminary report.
2. Although we acknowledge that 'black-glaze ware' has traditionally been used to refer to the so-called 'Campania' productions, we prefer to use 'black gloss ware' here. We believe that this denomination better differentiates Hellenistic non-vitrified glosses from Classical Greek glaze wares.

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Conflict of Interest

No potential conflict of interest was reported by the authors.

Author Contributions

CL contributed to the main text, conducted museum research, and documented the archaeological remains. JB contributed to the main text, analysed the Republican material and edited the figures. AQ contributed insights on the site, analysed the Late Roman material and edited the document.

Permissions Statement

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