

ESTUDOS ARQUEOLÓGICOS DE OEIRAS

Volume 37 • 2026



**3.º COLÓQUIO INTERNACIONAL HISTÓRIA DAS IDEIAS
E DOS CONCEITOS EM ARQUEOLOGIA
O POVOADO PRÉ-HISTÓRICO DE LECEIA E O SEU ENQUADRAMENTO
NO CALCOLÍTICO DO SUL PENINSULAR
ACTAS**

Editor científico: João Luís Cardoso

**CÂMARA MUNICIPAL DE OEIRAS
2026**

Estudos Arqueológicos de Oeiras é uma revista de periodicidade anual, publicada em continuidade desde 1991, que privilegia, exceptuando números temáticos de abrangência nacional e internacional, a publicação de estudos de arqueologia da Estremadura em geral e do concelho de Oeiras em particular, sem prejuízo daqueles que possam valorizar o conhecimento das antiguidades oeirenses, para além de contributos sobre a História da Arqueologia e de comunicações apresentadas a reuniões científicas organizadas pelo Centro de Estudos Arqueológicos do Concelho de Oeiras/Câmara Municipal de Oeiras.

Possui um Conselho Assessor do Editor Científico, assim constituído:

- Professor Doutor Nuno Bicho (Universidade do Algarve)
- Professor Doutor Alfredo Mederos Martín (Universidade Autónoma de Madrid)
- Professor Doutor Martín Almagro Gorbea (Universidade Complutense de Madrid)
- Professora Doutora Raquel Vilaça (Universidade de Coimbra)
- Professor Doutor Jorge de Oliveira (Universidade de Évora)
- Professor Doutor Mário Barroca (Universidade do Porto)

ESTUDOS ARQUEOLÓGICOS DE OEIRAS

Volume 37 • 2026 ISSN: 0872-6086

DOI: 10.5281/zenodo.19817015

EDITOR CIENTÍFICO – João Luís Cardoso
DESENHO E FOTOGRAFIA – Autores ou fontes assinaladas
PRODUÇÃO – Gabinete de Comunicação / CMO
CORRESPONDÊNCIA – Centro de Estudos Arqueológicos do Concelho de Oeiras
Fábrica da Pólvora de Barcarena
Estrada das Fontainhas
2730-085 BARCARENA

Os artigos publicados são da exclusiva responsabilidade dos Autores.

É expressamente proibida a reprodução de quaisquer imagens sobre as quais existam direitos de autor sem o prévio consentimento dos signatários dos artigos respectivos.

Aceita-se permuta
On prie l'échange
Exchange wanted
Tauschverkehr erwünscht

ORIENTAÇÃO GRÁFICA E

REVISÃO DE PROVAS – João Luís Cardoso e Autores

PAGINAÇÃO – César Antunes

IMPRESSÃO E ACABAMENTO – Gráficas Amares, Lda. – Amares – Tel. 253 992 735

DEPÓSITO LEGAL: 97312/96

THE CHALCOLITHIC "MEGA-SITE" OF VALENCINA DE LA CONCEPCIÓN (SEVILLE, SPAIN)

Thomas X. Schuhmacher¹, Alfredo Mederos Martín², Frank Falkenstein³, Nils Ostermeier⁴,
Charles Bashore Acero⁵ & Natalie El Dana⁶

Abstract

The ›mega-site‹ of Valencina de la Concepción-Castilleja de Guzmán extends throughout the northeastern limit of the Aljarafe Plateau, 6 km to the West of modern-day Seville, in southern Spain. During prehistoric times the site was located next to an inlet of the Atlantic Ocean, which covered most of the estuary of the Guadalquivir River. Geomagnetic survey of a surface of over 37.5 ha have revealed the existence of seven ditched enclosures, each consisting of between one and three ditches. In addition, two small enclosures with a sinuous ditch forming a sort of bastion were documented. By means of the survey a large number of pits, circular huts and workshops excavated in the ground and a new necropolis area with some 80 tombs with a circular chamber and short access corridor under barrows and possible hypogea could be documented. During the excavations carried out in the municipal plot of Cerro de la Cabeza we have been able to investigate a dense sequence of Chalcolithic pits and semi-excavated huts and workshops, located near the edge of one of the ditches. The series of C14 dates obtained by AMS and the reconstruction of the outline of the ditched enclosures begin to reveal the sequence of the settlement. Starting in the late Neolithic/Early Chalcolithic (end of the 4th millennium BC) the site experiments its peak occupation during the Middle Chalcolithic (first half 3rd millennium BC). During the transition to the Late Chalcolithic (Mid 3rd millennium BC) there seems to be a reduction in the size of the settlement, being limited to the central area of modern day Valencina, during the Late Chalcolithic (second half of the 3rd millennium BC). It seems that after 2300/2250 BC all the ditches in Valencina were abandoned and refilled. We also present some evidence that seems to indicate a short and not very intense occupation of the Cerro de la Cabeza area during the Early Bronze Age (beginning of the 2nd millennium BC).

The site of Valencina played an important role as the settlement of a large population, acting as a central place controlling the mouth of the Lower Guadalquivir, as well as a production centre and exchange gateway, due to its proximity to the sea, of exotic products and goods, to be processed, consumed and traded in it, also functioning as a funerary and ritual space of reference for a wide region.

Keywords: Chalcolithic – Guadalquivir Estuary – Ditched Enclosures – Geomagnetic Surveys – Manual Drillings – Archaeological Excavations – Dwelling Structures – Mega-sites – Complex Societies

¹ German Archaeological Institute Madrid. thomas.schuhmacher@dainst.de

² Universidad Autónoma de Madrid. alfredo.mederos@uam.es

³ Julius-Maximilians University Würzburg. frank.falkenstein@uni-wuerzburg.de

⁴ Julius-Maximilians University Würzburg. nils.ostermeier@uni-wuerzburg.de

⁵ Universidad Autónoma de Madrid. charlesbashoreacero@gmail.com

⁶ Julius-Maximilians University Würzburg. natalie.el-dana@uni-wuerzburg.de

1 – INTRODUCTION

The ‘mega-site’ of Valencina de la Concepción-Castilleja de Guzmán (henceforth just Valencina) extends along the northeastern boundary of the Aljarafe Plateau, 6 km west of present-day Seville, in Southern Spain (SCHUHMACHER et al., 2015; 2019a; 2019b; MEDEROS et al., 2016; 2020) (Fig. 1). During prehistoric times it was located next to an inlet of the Atlantic Ocean, which covered most of the Guadalquivir estuary (SCHULZ, 1995; ARTEAGA & ROOS, 1995; ARTEAGA et al., 1995; 2016; BORJA, 2013; BARRAGÁN, 2024). The wide prehistoric estuary reached as far as present-day Alcalá del Río, some 15 km northeast of Valencina, facilitating navigation and providing Valencina with a quick and easy connection to the Atlantic Sea (Fig. 1).

The site of Valencina first became known through the accidental discovery of the tholos tomb of La Pastora in 1860, which was in fact the first megalithic tomb to be discovered in the province of Seville (VARGAS JIMÉNEZ et al., 2012; 2019; RUIZ MORENO, 2013). This monument, together with the tombs of Matarrubilla, 10.042-10.049 and Montelirio form the largest and most complex funerary structures in Valencina, as well as for the Chalcolithic of the Iberian Peninsula in general (COLLANTES, 1969; CRUZ-AUÑÓN & MEJÍAS, 2013; GARCÍA SANJUÁN, 2013; GARCÍA SANJUÁN et al., 2013; LUCÍAÑEZ TRIVIÑO et al., 2013; 2021; FERNÁNDEZ FLORES et al., 2016).

In contrast, the settlement of Valencina was not known until 1971, when the first corresponding excavation was carried out in the area known as the ‘Perrera’, not far from the area of Cerro de la Cabeza, which is the main area of interest of our project (FERNÁNDEZ GÓMEZ, 2013; RUIZ MATA & MEDEROS, 2020). In 1975 the first ditches were identified in this same area. These first excavations were followed by more than 130 archaeological interventions in Valencina derived from construction works, many of them located in the settlement area (VARGAS JIMÉNEZ, 2004; 2013).

Traditionally, the mega-site has been divided into two areas (VARGAS JIMÉNEZ, 2004; CRUZ-AUÑÓN & MEJÍAS, 2013; MEDEROS et al., 2020), the huge settlement area to the north, with some 236 hectares, mostly located under the modern town of Valencina and a necropolis area with another 233 hectares to the southeast. More recent studies question this strict separation given that human remains and even inhumations have been located in the so-called settlement area (COSTA CARAMÉ et al., 2010; GARCÍA SANJUÁN, 2013; GARCÍA SANJUÁN & MURILLO BARROSO, 2013). Therefore, it is clear that the difference seems to lie in the fact that in the southeast we do find monumental funerary constructions, often with rich grave goods and offerings, mostly consisting of both tholoi and hypogea, while in the northern part of the site, in the area primarily used for habitation, the human bodies were buried in simple pits or in ditches, in most cases without any grave goods or with very few artefacts.

Impact and significance of the site of Valencina

Due to the urban expansion of the municipality of Valencina, some 130 archaeological excavations have been carried out since the 1970s. Nevertheless, most of them refer to the settlement area, and consist of emergency excavations or follow-ups of construction works, therefore, the reality is that the excavated surface does not exceed one hectare, or approx. 0.66 % of the urban area of Valencina (MEJÍAS, 2017, p. 87, table 5). Most of the materials recovered during these rescue excavations are yet to be studied or published. Large sectors of the settlement area are nowadays found under the houses of the current town of Valencina, and are no longer available for archaeological research. Therefore, until 2014, when we started our research project, we only had a very fragmented picture of the settlement, with hundreds of pits of different sizes, short segments of the ditches and supposed hut structures scattered over a possible extension of about 230 hectares.

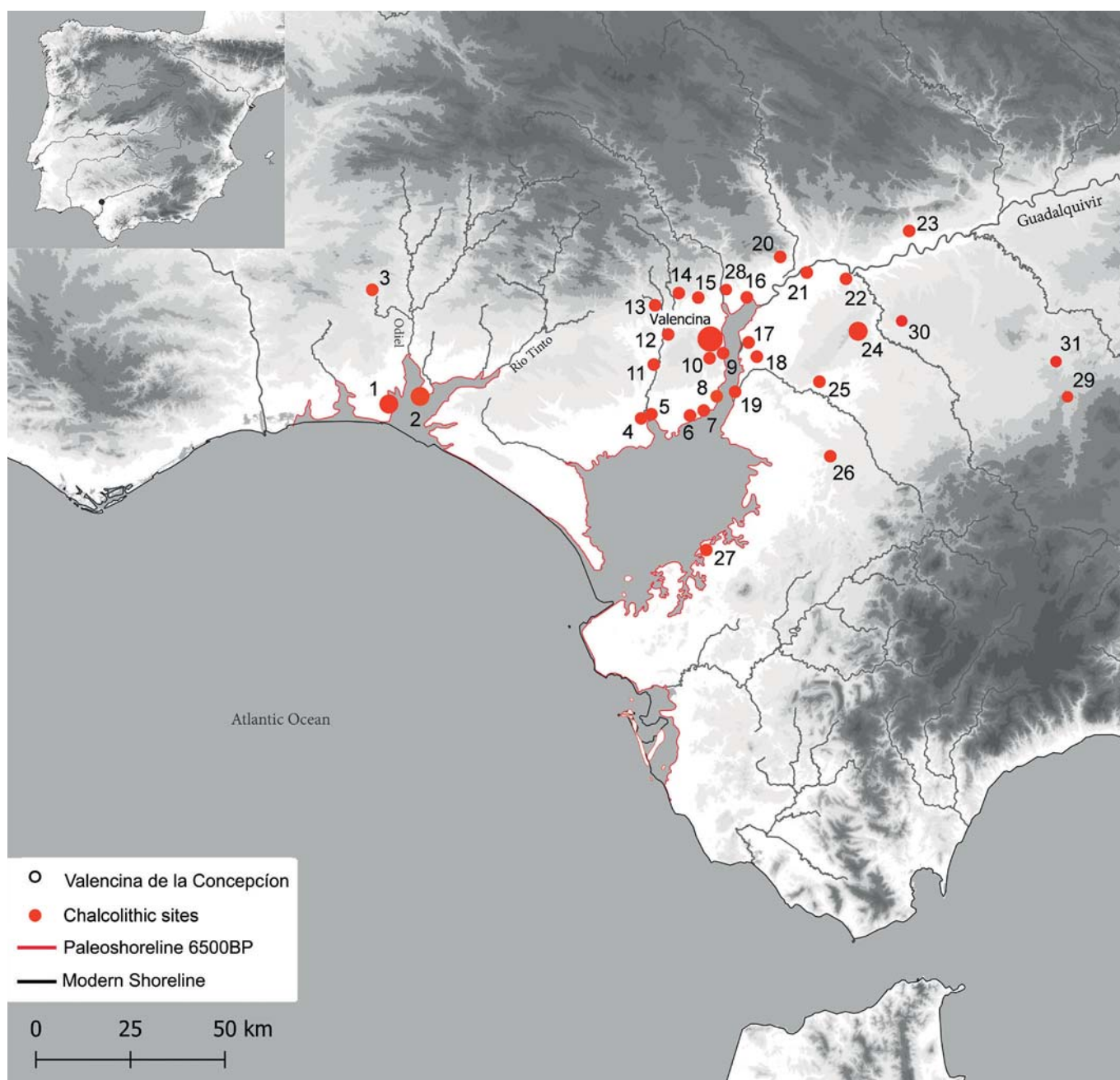


Fig. 1 – Location of the Valencina de la Concepción site, other chalcolithic sites and the palaeo-coastline according to Arteaga et al. 2016 and Barragán 2016. 1 Papa Uvas (Aljaraque, Huelva); 2 La Orden – Seminario de Huelva (Huelva); 3 Cabezo Juré (Alosno, Huelva); 4 Chillas (Villamanrique de la Condesa, Sevilla); 5 Aznalcázar (Sevilla); 6 La Marismilla (La Puebla del Río, Sevilla); 7 Estacada de Álfaro und Cañada Fria (La Puebla del Río, Sevilla); 8 Cerro de San Juan und Cantalobos (Coria del Río, Sevilla); 9 El Carambolo (Camas, Sevilla); 10 El Zaudín (Tomares, Sevilla); 11 Chichina (Sanlúcar la Mayor, Sevilla); 12 Olivares (Sevilla); 13 Los Páramos (Aznalcóllar, Sevilla); 14 Cerro del Castillo/Mesa Redonda (Gerena, Sevilla); 15 SE-B/SE-K (Salteras, Sevilla); 16 La Angorilla (Alcalá del Río, Sevilla); 17 Parque de Miraflores (Sevilla); 18 Universidad Laboral (Sevilla); 19 Torre de los Herberos (Dos Hermanas, Sevilla); 20 Mesa Redonda (Villaverde del Río, Sevilla); 21 La Loma del Real Tesoro (Carmona, Sevilla); 22 La Morita (Cantillana, Sevilla); 23 Mesa de Setefilla (Lora del Río, Sevilla); 24 Carmona und El Acebuchal (Sevilla); 25 El Gandul (Alcalá de Guadaira, Sevilla); 26 El Amarguillo (Los Molares, Sevilla); 27 Huerto Pimentel (Lebrija, Sevilla); 28 El Hediondal (Guillena, Sevilla); 29 El Negrón (Gilena, Sevilla); 30 Las Cumbres (Carmona, Sevilla); 31 Marinaleda (Marinaleda, Sevilla). Design: N. El Dana – Th. X. Schuhmacher.

This is probably one of the reasons why the settlement area has had little impact, especially in international publications. On the contrary, and especially recently, many articles have been published regarding the necropolis, its extraordinary monumental tombs and grave goods, particularly since the emergency excavation of the tomb of Montelirio between 2007 and 2009-10, with 22 burials in anatomical connection, given the fact that the larger tombs, such as La Pastora or Matarrubilla, had been excavated in the late XIXth and early XXth centuries, and had probably been plundered in ancient times (CRUZ-AUÑON & MEJÍAS, 2013; GARCÍA SANJUÁN et al., 2013; LUCÍAÑEZ TRIVIÑO et al., 2013; 2021; MEJÍAS et al., 2015; FERNÁNDEZ FLORES et al., 2016; VARGAS JIMÉNEZ et al., 2019; CINTAS-PEÑA et al., 2023). This is probably also the reason why alternative explanations for the importance of the site of Valencina have emerged. It has been hypothesised that it could be a temporary, occasional or seasonal gathering site for the celebration of religious festivals and burial rites (GARCÍA SANJUÁN, 2013, p. 35; GARCÍA SANJUÁN et al., 2017, p. 250, 254; ARANDA et al., 2020, p. 16; STANISH et al., 2024). Other researchers consider that it would be a collective regional necropolis, where the population of the surrounding settlements, up to a maximum distance of 30 km, would perform ritual communal banquets (ESCACENA et al., 2018, p. 13, 17, 26 Fig. 2, 28 table 3).



Fig. 2 – Valencina de la Concepción. Magnetometer prospections 2014, 2017 and 2018. Magnetograms of the prospection areas 1-8 on the digital orthophoto as of 2018. Design: N. Ostermeier.

2 – RESEARCH AT THE SETTLEMENT FROM 2014 ONWARDS

In 2014, thanks to the collaboration between the Autonomous University of Madrid (Spain), the University of Würzburg (Germany) and the Museum of Valencina de la Concepción, the first geophysical and archaeological survey was carried out (SCHUHMACHER et al., 2015; 2019a; 2019b; 2021; 2024a; 2024b; MEDEROS et al., 2016; 2020; 2021; 2023a). Since 2016 it has become a project of the German Archaeological Institute in Madrid in collaboration with the aforementioned institutions. In 2017 the Junta de Andalucía authorised a General Research Project focused on the northern part of the site of Valencina de la Concepción with a duration of five campaigns, which was later extended due to delays caused by covid. The project focuses on the history of the Chalcolithic settlement of Valencina de la Concepción. The research includes excavations and field surveys in agricultural land in the northern part of the archaeological site, more specifically in the area known as ‘Cerro de la Cabeza’. In addition, some earlier emergency excavations in the adjacent northern area of the modern city are also being revisited. Through field and geomagnetic surveys, the expansion and structure of the prehistoric settlement areas are being explored, followed by excavations being carried out to investigate and date the different areas in order to reconstruct the history of the settlement.

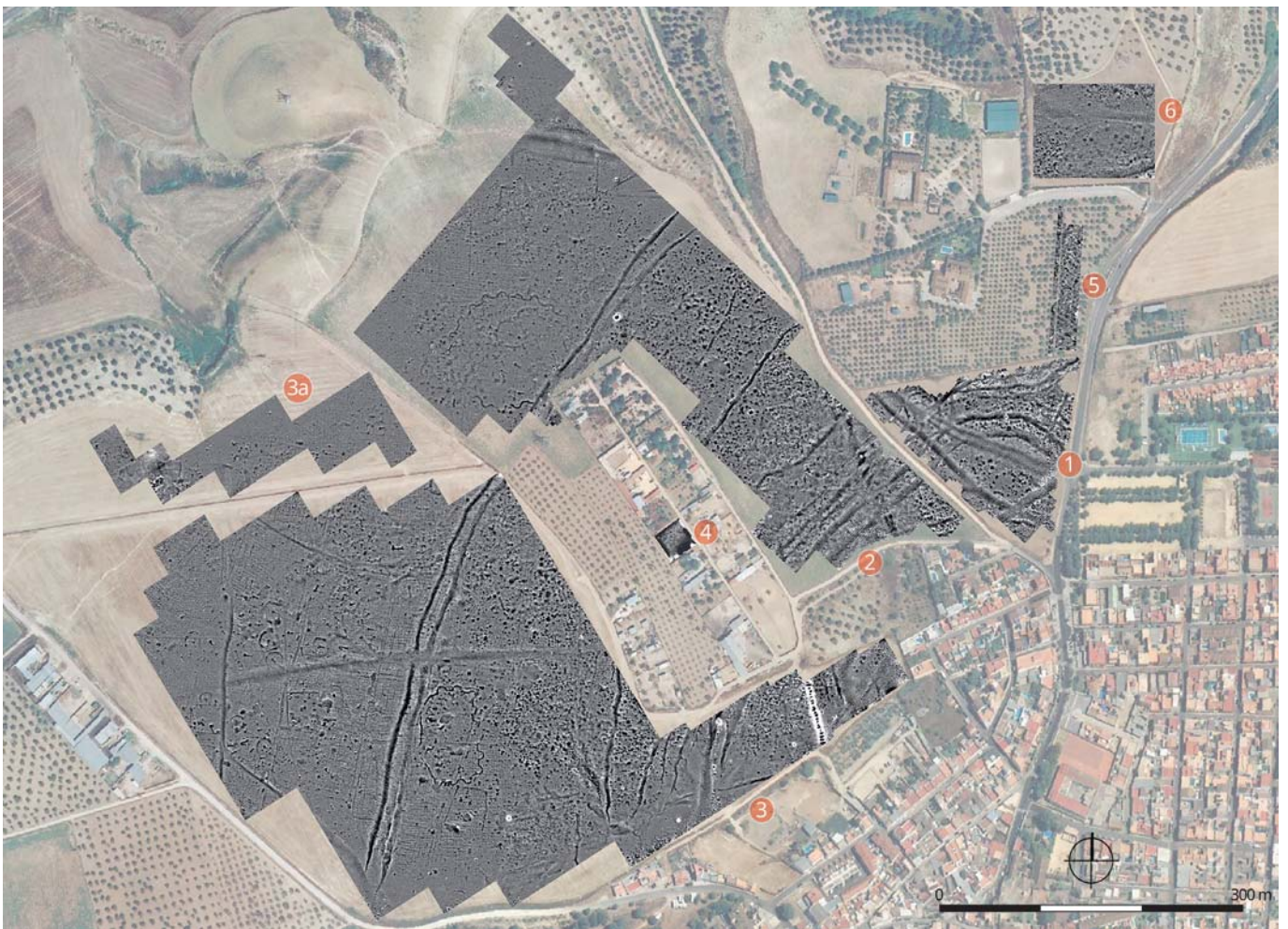


Fig. 3 – Valencina de la Concepción. Magnetometer prospection 2022. Prospection areas 2, 3 and 3a. Magnetograms on the digital orthophoto. Dynamics ± 8 nT, displayed in 256 grey scales, measurement point density 10×50 cm (interpolated to 10×25 cm), 30 m grid. Design: N. Ostermeier.

So far, a total of 37.5 hectares of the northern part of the settlement have been surveyed by geomagnetics (figs. 2 and 3). In addition, a series of manual drillings have been executed through most of the ditches detected in the geophysics to determine the width, depth and profile of the ditches and to obtain an approximate stratigraphy, as well as organic material to date the infill sediments. Additionally, in 2019 a geoelectric transect was carried out with the aim of obtaining a profile across all the ditches in the municipal plot of Cerro de la Cabeza. In several campaigns, a surface survey was carried out with the collection of material over an area of about 14 hectares. In 2017, 2018, 2019, 2022 and 2024 we executed excavation campaigns in five sectors, 3, 4, 5A, 5B and 6, of the municipal plot of Cerro de la Cabeza (figs. 4 and 5). On the other hand, we are studying emergency excavations carried out in the northern sector of the settlement, with particular attention so far to the Pabellón Cubierto (excavations 2008-09) (ORTEGA, 2013) and Nueva Biblioteca (three excavation campaigns between 2018 and 2024), interventions directed by M. Vargas, M. Ortega and P. López (VARGAS JIMÉNEZ, 2021; VARGAS JIMÉNEZ et al., 2025).

Faunal bones and seeds recovered, both during the excavation at Cerro de la Cabeza and in several emergency excavations, as well as from those recovered from the ditch infills by hand drilling have allowed us to date most of the documented structures by means of some 115 short-life radiocarbon dates (AMS) (MEDEROS et

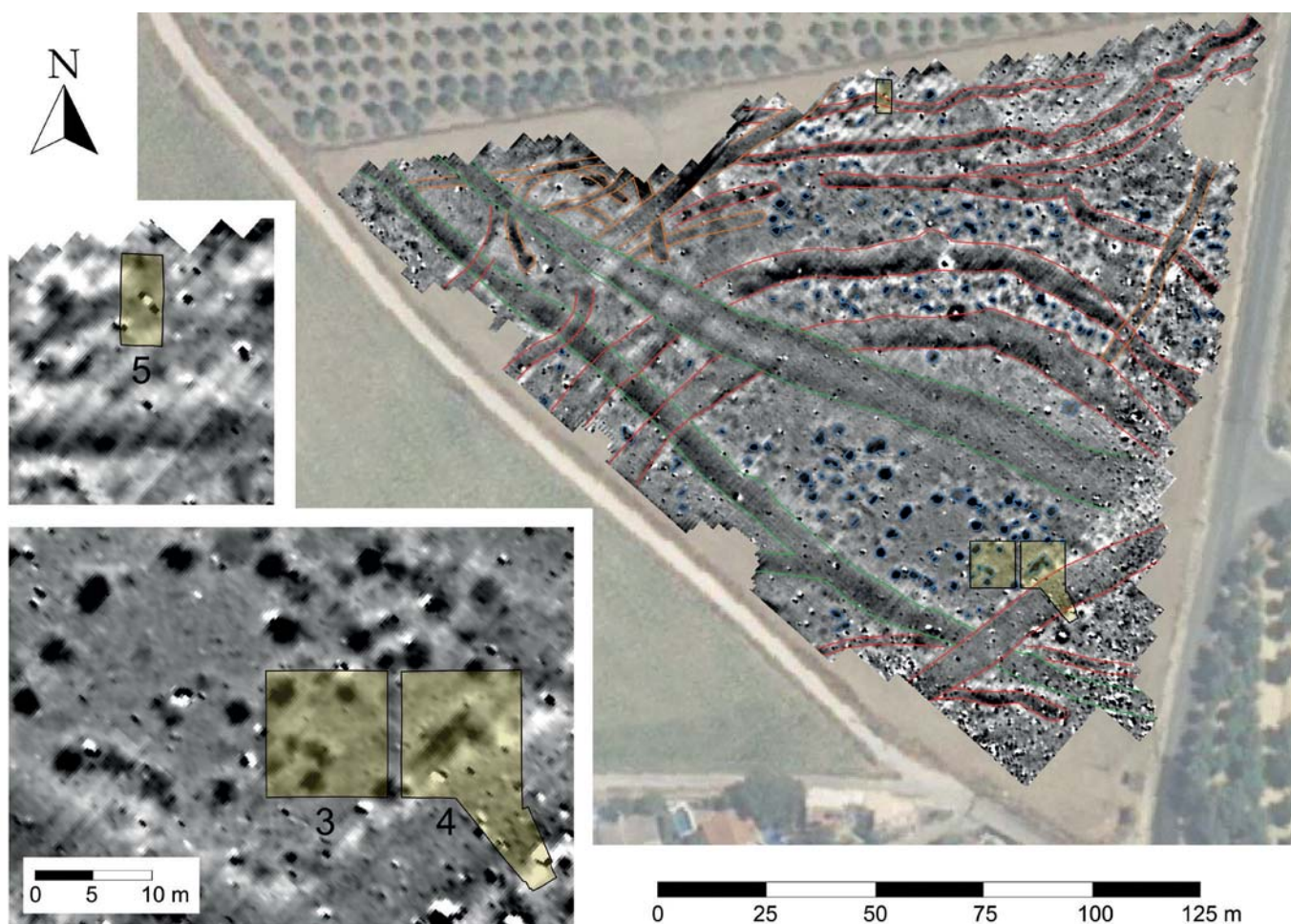


Fig. 4 – Valencina de la Concepción. Location of excavation areas 3, 4 and 5A (2018) in the municipal plot on the ‘Cerro de la Cabeza’ and in front of the result of the magnetometer prospecting of 2014. Design: Department of Prehistory, University of Würzburg.

al., 2021, p. 315-315 table 1; 2023a, p. 266-279 table 1, Fig. 27-29; SCHUHMACHER et al., 2024b, p. 111 fig. 52) (Fig. 6). These dates thus complete the 178 dates that are already published, most of which refer to funerary contexts (GARCÍA SANJUÁN et al., 2018).

Through intensive scientific analyses using radiocarbon dating, archaeobotany, zooarchaeology, archaeometric analysis of materials and soil science, the spatial, chronological, functional and economic aspects of the Chalcolithic settlement of Valencina de la Concepción are being investigated. The objectives of the project are to clarify the cultural sequence, the dynamics, density and structure of the settlement's activities, the supply of raw materials, craft production, long-distance contacts and, in short, the social organisation of the mega-settlement.

3 – THE DITCHED ENCLOSURES

Geomagnetic surveys have revealed the existence of seven ditched enclosures, each consisting of between one and three ditches (Enclosures 1-5, 8 and 9) (Fig. 7). In addition, two small enclosures with a sinuous ditch forming a sort of bastion (Enclosures 6 and 7) were documented (SCHUHMACHER et al., 2024a; 2024b). This work, together with the results of several rescue excavations and magnetometric surveys carried out by J. C. Mejías (2017), H. Becker and the University of Granada at Cerro de la Cruz (MEDEROS et al., 2021, p. 295-297 Fig. 6-7) and putting together the existing absolute dates for the infills of the ditches, have allowed us to establish a reconstruction of the sequence and development of the earthworks and the evolution of the different enclosures at Valencina.

The site of Valencina de la Concepción is part of the phenomenon of ditched enclosures, which in the Iberian Peninsula became a relevant topic of prehistoric research since the 1970s (DÍAZ-DEL-RÍO, 2003; MÁRQUEZ ROMERO & JIMÉNEZ JÁIMEZ, 2010; VALERA, 2013; GARCÍA SANJUÁN, 2013; SCHUHMACHER et al., 2015; 2019b; VALERA, 2015; 2024; JIMÉNEZ JÁIMEZ et al., 2025). The size of most of the ditched enclosures is between 15 and 30 hectares. Among them we find some 'mega-sites' such as Porto Torrão in Alentejo with an area of 75-100 ha, La Pijotilla (Extremadura) with 80 ha, Marroquíes Bajos (Jaén) with 113 ha, or Valencina de la Concepción, which according to our research in its heyday had a maximum area of 180 ha (MEDEROS et al. 2023a, p. 280

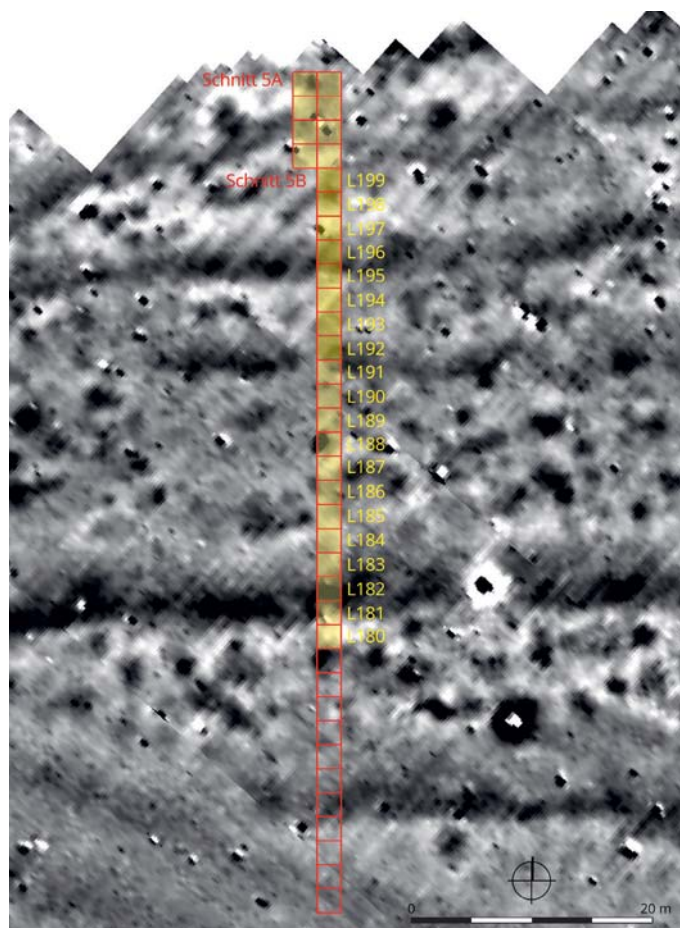


Fig. 5 – Valencina de la Concepción. Laying out of excavation trenches 5A and 5B against the background of the magnetogram. Design: N. Ostermeier.

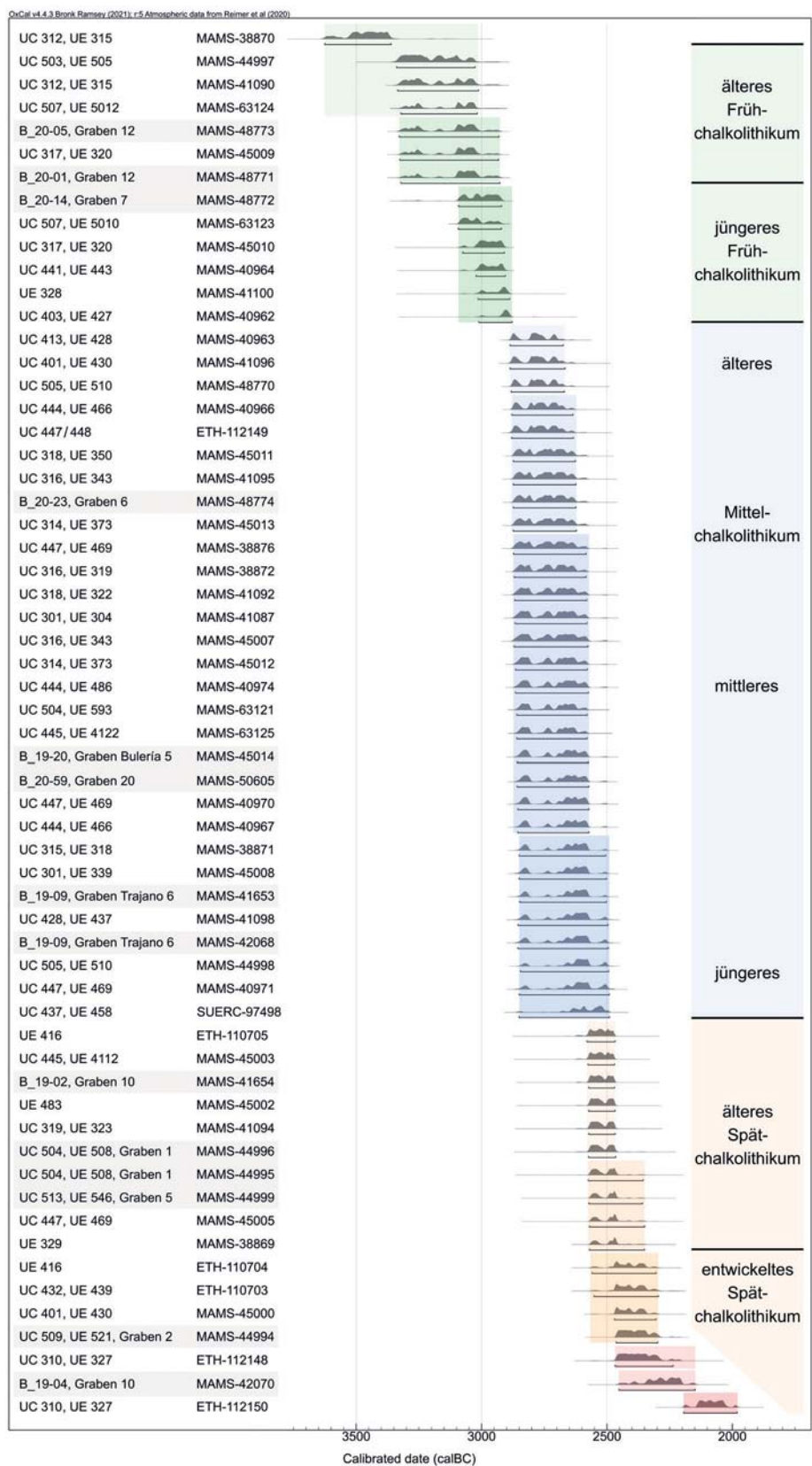


Fig. 6 – Valencina de la Concepción. Chronological diagram of the AMS-14C dates available for the excavation areas on the ‘Cerro de la Cabeza’ and from the boreholes in the recognised ditches. Design: N. Ostermeier.

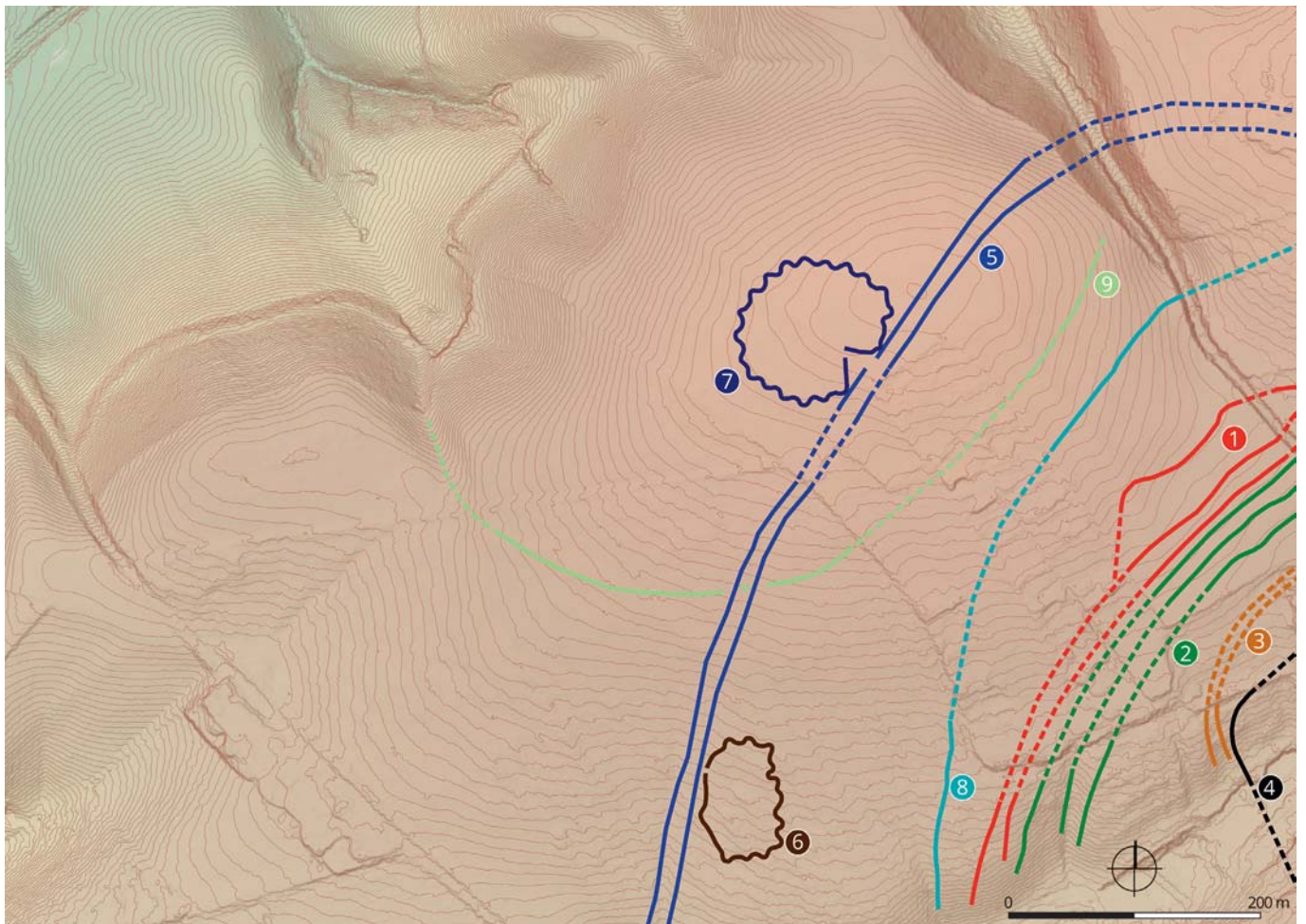


Fig. 7 – Valencina de la Concepción. Magnetometer prospecting 2022. Course of the Chalcolithic ditches in the area of the prospecting areas 2, 3 and 3a on the digital terrain model. Design: N. Ostermeier.

Fig. 30; 289 table 3; SCHUHMACHER et al. 2024a, p. 348 Fig. 6; 2024b: 114 Fig. 53). We must also add two areas of necropolis, one in the southeast and south of the site and another recently discovered by geomagnetics in the northwest (CRUZ-AUÑÓN & MEJÍAS, 2013, p. 187 Fig. 4; SCHUHMACHER et al., 2024b: 60 Fig. 10, 114 Fig. 53), which together must cover an area of about 230 hectares.

Research undertaken by Antonio Valera and others in southern Portugal was able to demonstrate the beginning of ditched enclosures between 3500 and 2900 BC, and an explosion in the number of such sites between 2900 and 2300 BC. After 2300 BC almost all of these enclosures are abandoned (VALERA, 2013; 2015; 2021). A similar evolution can be observed in Southwestern Spain (MÁRQUEZ ROMERO & JIMÉNEZ JAÍMEZ, 2010, p. 508-513, 518 s. mapa 07).

If we look at the diagram published by Blanco González et al. (2018) for the Southwest of the Iberian Peninsula, we can see that the number of ^{14}C dates grew exponentially from 3500 BC onwards, peaked around 2500 BC, followed by an initial decline at first and some stabilisation during the Early Bronze Age. This probably roughly reflects the evolution of population numbers and density during this period (compare with DÍAZ-DEL-RÍO, 2021, p. 171-173). We can observe a concentration of population in certain areas and large sites, such as Porto Torrão, Perdigões, Valencina de la Concepción or Marroquies Bajos (MÁRQUEZ ROMERO & JIMÉNEZ JAÍMEZ, 2010; VALERA et al., 2014; MÁRQUEZ ROMERO et al., 2022). A little later,

around 3200 BC, settlements with stone walls were built, such as Los Millares (DORADO et al., 2024, p. 324, 323 tabla 4), with a large necropolis attached (MOLINA et al., 2020), or Zambujal.

Another question is what caused this population growth, whether it was due to better climatic conditions, improved agricultural techniques and cultivation, or the use of secondary products. We do not understand very well what this process was like, especially because we lack much information on well-researched sites for the recent Neolithic, i.e. the 4th millennium BC, especially in the Southwest of the Iberian Peninsula (MARTÍNEZ SÁNCHEZ et al., 2024). Some data suggest the general use of siliform structures and the existence of silo fields (“campo de hoyos”) already towards the middle of the 4th millennium BC. Therefore, the demographic expansion we observe at the end of the 4th millennium BC would have been a more gradual process.

4 – BIRTH AND EVOLUTION OF THE SITE OF VALENCINA

The data obtained from the geomagnetic surveys, our excavations and the emergency excavations have made it possible to establish a reconstruction of the course and development of the ditches, the evolution of the different enclosures and of the settlement of Valencina in general (Fig. 8).

The earliest date recorded so far for a settlement structure in Valencina remains that of pit UC 312 from sector 3 of our excavations, 3600-3300 BC (MAMS-38870) (MEDEROS et al., 2023a, p. 272; SCHUHMACHER et al., 2024b, p. 112-113). However, a second date from the same pit is slightly younger, 3300-3100 BC (MAMS-41090). Pit UC 501, with its flint industry, could also point to the same phase, though we are yet to obtain an absolute date from this structure. The date of individual 150 from the artificial burial cave of La Huera, 3482-3102 BC, also falls within this same time period, but compared to the other dates of the burials from this pit, it must be considered as diverted.

This would coincide with the published dates of the open-air sites of Papa Uvas (Aljaraque, Huelva), Base Naval de Rota-Cantarranas-La Viña (El Puerto de Santa María, Cádiz), Polideportivo de Martos (Jaén), Grañena Baja II and Arroyo Regordillo (both Jaén), Casa del Tabaco (El Carpio, Córdoba), Huerta del Ciprés and Arroyo Saladillo (both Antequera, Málaga), apart from several funerary and cave contexts (MARTÍNEZ SÁNCHEZ et al., 2024, table 8). Therefore, the existence of a Late/Final Neolithic settlement phase in Valencina would be conceivable. However, as long as there are not any new dates of this phase from reliable contexts, a Late Neolithic settlement (3600-3300 BC) must remain hypothetical.

However, an older phase of the Early Chalcolithic (ca. 3300-3000 BC) has been confirmed, to which several pits belong, UC 312 (MAMS-38870 and MAMS-41090), UC 317 (MAMS-45009 and MAMS-45010), UC 503 (MAMS-44997) and UC 507 (MAMS-63123 and MAMS-63124) (MEDEROS et al., 2023a, p. 273-276; SCHUHMACHER et al., 2024b, p. 113, 116). According to the ¹⁴C data from the boreholes, enclosure 3 with the two parallel ditches 11 and 12 already existed in the earliest phase of the Early Chalcolithic occupation (figs. 7 and 8, in orange). Thanks to the data from several emergency excavations we were able to complete the route of this enclosure, which would therefore be the first to be built in Valencina, which occupied a central part of the settlement, enclosing an area of 6.6 to 8.8 hectares. However, pits UC 312, UC 317, UC 503 and UC 507 would be located outside the area delimited by enclosure 3. Therefore, it could be assumed that an open settlement area existed on the lower southern slope of Cerro de la Cabeza during the Early Chalcolithic, before or after the construction of ditch 3.

So far, there are no reliable dates for the two small-scale enclosures 6 and 7, which cover an area of 0.5 ha and 1 ha respectively, as well as for enclosure 9 (24 ha) (figs. 7 and 8, in brown and light green). Enclosures

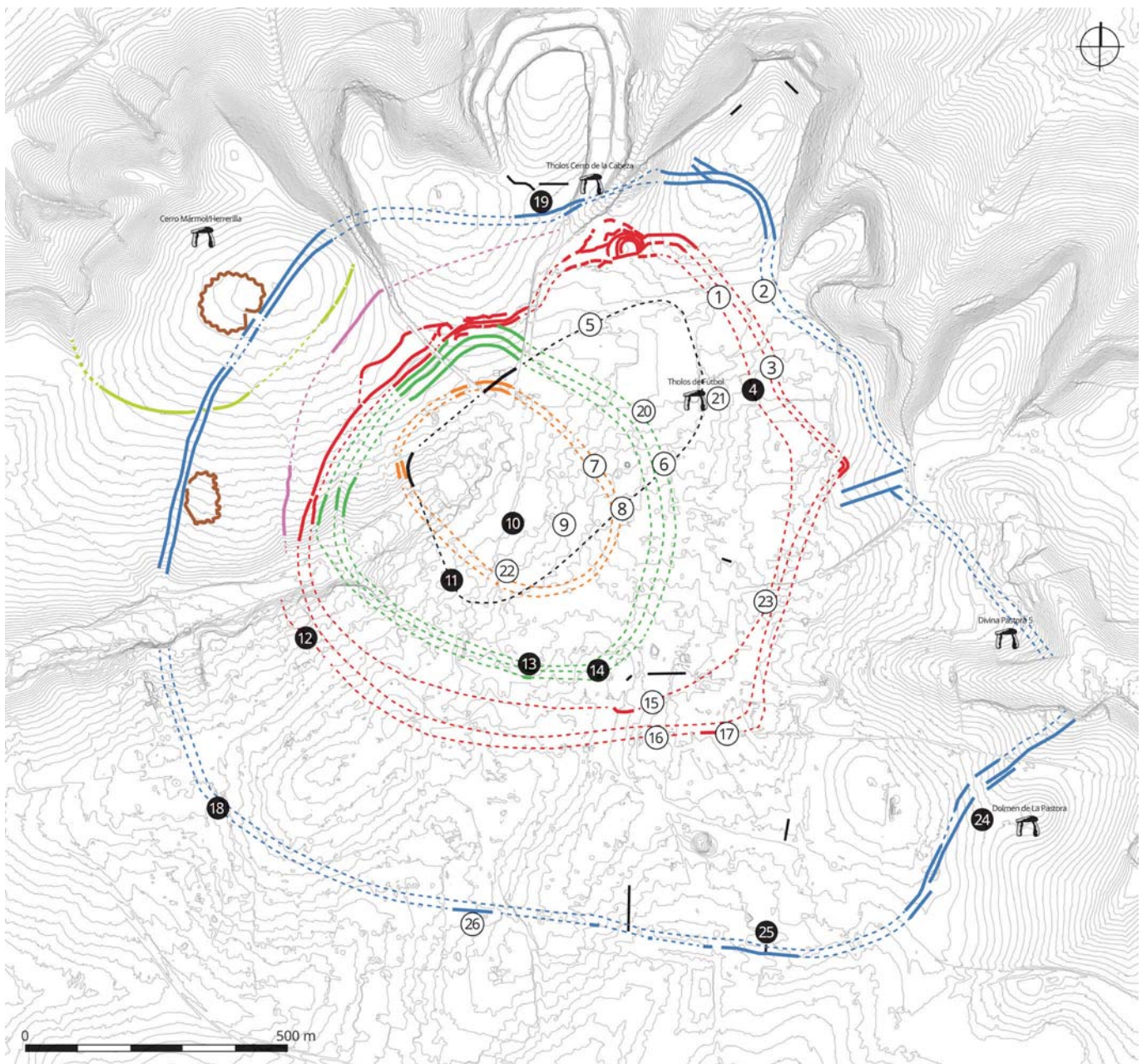


Fig. 8 – Valencina de la Concepción. Hypothetical reconstruction of the different enclosures. Continuous lines: documented ditch courses; interrupted lines: reconstructed. Numbers: Ditches in archaeological rescue excavations. 1 Estacada Larga (1994/057), ditches 57.2.3.10; 2 Estacada Larga (1994/057), ditches 57.8 und 57.9; 3 C/ Carlos Cano 24 (2010/122); 4 La Candelera-Emisora (1989/041); 5 Polideportivo Municipal (1985/034); 6 La Perrera C (Ecke C/Ebro mit C/Guadalquivir; 1975/010); 7 La Perrera D (C/Guadalquivir 18-23; 1975/010); 8 La Perrera A (C/ Jacinto Benavente 7; 1975/010); 9 C/ Maestro Gabriel 8 (2011/110); 10 Nueva Biblioteca; 11 C/ Trajano 6; 12 C/ Mariana Pineda (1996/058; 2006/93); 13 Av. Andalucía 9 (2006/94); 14 C/ Ruiseñor 20 (2007/96); 15 La Horca (1988/037); 16 Nuevo Depósito de Aguas (2004/085) and La Alcazaba MA-4 (1996-97/059); 17 La Horca (1988/037); 18 C/Bulería (2019); 19 Cerro de la Cabeza (1976/013); 20 C/ Duero 39 (1989/038); 21 Campo de Fútbol; 22 C/ Trabajadores 14-20 (2008/101); 23 La Cima (1989/042); 24 Parcela Municipal Entorno de La Pastora (2010/123); 25 Plan Parcial Matarrubilla (2001/069 and 2004/084); 26 Colegio Público Algarrobillo (2003/081). Design: N. El Dana – R. de Almeida – Th. X. Schuhmacher.

6 and 7 are formed by a ditch with a sinuous trajectory, forming a kind of bastion or lobulated structure. While enclosure 6 has a rectangular plan of 60 m x 95 m, enclosure 7 is circular in shape with a diameter of 120 m. The best parallel for enclosure 6 is that of Venta de Rapa (Mancha Real, Jaén), although in this case it belongs to the Late Chalcolithic (LECHUGA et al., 2014, p. 355-356, Fig. 2-3), while the pottery found during the archaeological survey in the area of enclosure 6 could indicate a date in the Early Chalcolithic (SCHUHMACHER et al., 2024b, p. 77 Fig. 24). Enclosure 7, on the other hand, closely resembles several enclosures documented in the Portuguese Alentejo, such as Xancra (Cuba, Beja), Outeiro Alto 2 (Serpa, Beja), Borrachos (Serpa, Beja), Folha do Ouro 1 (Serpa, Beja), Moreiros 2 (Portalegre), Santa Vitória (Campo Maior, Portalegre), Monte da Contenda (Arronches, Portalegre) and some of the ditches of Perdigões (Reguengos de Monsaraz) (VALERA, 2012; 2020; VALERA et al., 2020). In the case of Perdigões, this refers mainly to ditches 3 and 4, which seem to have formed a rectangular enclosure, although the part that would close the enclosure to the East is missing. Available radiocarbon dates date these ditches to the Middle and early Final Chalcolithic (ca. 2800-2450 BC) (VALERA et al., 2014, p. 20. Fig. 4, tab. 1).

Enclosures 7 and 9 of Valencina are arranged almost concentrically on the crest of Cerro Mármol, which forms a spur on the edge of the Aljarafe plateau. They counteract enclosures 1 to 5 and 8, which are oriented towards the interior of the Aljarafe. This could indicate that there was a temporal proximity between enclosures 7 and 9. Furthermore, geomagnetics clearly shows that the double ditch of enclosure 5, assignable to the Middle Chalcolithic, overlaps with the ditch of enclosure 9, while it respects enclosure 7 or seems to be related to it. Therefore, enclosure 9 may have existed before enclosures 3, 6 and 7, or all four may be contemporary and belong to the older phase of the Early Chalcolithic (SCHUHMACHER et al., 2024b, p. 60 Fig. 10).



Fig. 9 – Valencina de la Concepción 2024. Trench 5B. East profile with the gate situation of ditch UC 512 (ditch 3/5) and accompanying post hole. Photo: M. Sánchez; DAI Madrid.

According to one of the ^{14}C dates (MAMS 48772), it seems that the innermost ditch 7 of enclosure 2 was excavated in a recent phase of the Early Chalcolithic (ca. 3000-2800 BC) (figs. 7 and 8, in green). We can also place pits UC 403 (MAMS-40962) and UC 441 (MAMS-40964), as well as the infill layer UE 328 (MAMS-41100) in this same phase.

Most of the documented structures of the settlement can be assigned to the Middle Chalcolithic (ca. 2800-2550 BC) (MEDEROS et al., 2023a, p. 276; SCHUHMACHER et al., 2024a, p. 344 Fig. 6; 2024b, p. 117-119). For this phase we have a total of 30 ^{14}C dates from our excavations and drillings. The construction of ditches 6 and 5 of enclosure 2 took place in this period (MAMS-48774; MAMS-44999) (Fig. 9). According to our reconstruction, enclosure 2 would have covered an area of 35 ha, which would have multiplied the surface area compared to the former enclosure 3 (Fig. 8, in green).

The settlement area delimited by enclosure 2 was investigated by the excavation of sectors 3 and 4. Here, at least five pits (UC 447/448; UC 465; UC 301; UC 314 and UC 315), which due to their dimensions can probably be considered as semi-subterranean dwellings and presumably four workshops (UC 444; UC 445; UC 309 and UC 316), were uncovered. All of these features were excavated into the subsoil reached a depth of up to 1 m, had large amounts of disintegrated adobe in the infill layers, as well as amorphous chunks of burnt adobe or fragments of adobe bricks along the edges of the pits. The deepest part of the walls was probably reinforced with a thick layer of clay, while the ascending walls were made of wattle-and-daub, rammed earth or mud bricks. At least four of the huts (UC 447/448; UC 301; UC 314 and UC 315), as well as the presumed workshops UC 316, UC 444 and UC 445 and the pits UC 318 and UC 413, date to the early Middle Chalcolithic, 2900-2700 BC. The probably rapid and intentional infilling of the well UC 464, located in the immediate vicinity of the workshop area UC 445, also dates to the same period (MEDEROS et al., 2023a, p. 281; SCHUHMACHER et al., 2024b, p. 114 Fig. 53, 115 Fig. 54).

It is possible that in a more advanced phase of the Middle Chalcolithic, enclosure 1 was already built, as ditch 1 and probably also ditch 2 show two phases (figs. 7: 8, in red; 10). Thus, the dating of the infill of the oldest phase of ditch 1 suggests a Middle Chalcolithic date (MAMS-63121) (Fig. 11). In the infill of pit 20, which forms a bastion-like projection of enclosure 1, a ^{14}C date was obtained by hand drilling (MAMS-50605), which also dates to the Middle or early Late Chalcolithic (MEDEROS et al., 2023a, p. 282; SCHUHMACHER et al., 2024b, p. 114 Fig. 53, 115 Fig. 54).

The Middle Chalcolithic also includes the construction of enclosure 5 which, with a surface area of ca. 180 ha, marks the maximum extension of the area delimited by ditches in Valencina (MEDEROS et al., 2023a, p. 283-284; SCHUHMACHER et al., 2024b, p. 114 Fig. 53, 116 Fig. 54) (figs. 7 and 8, in dark blue). This

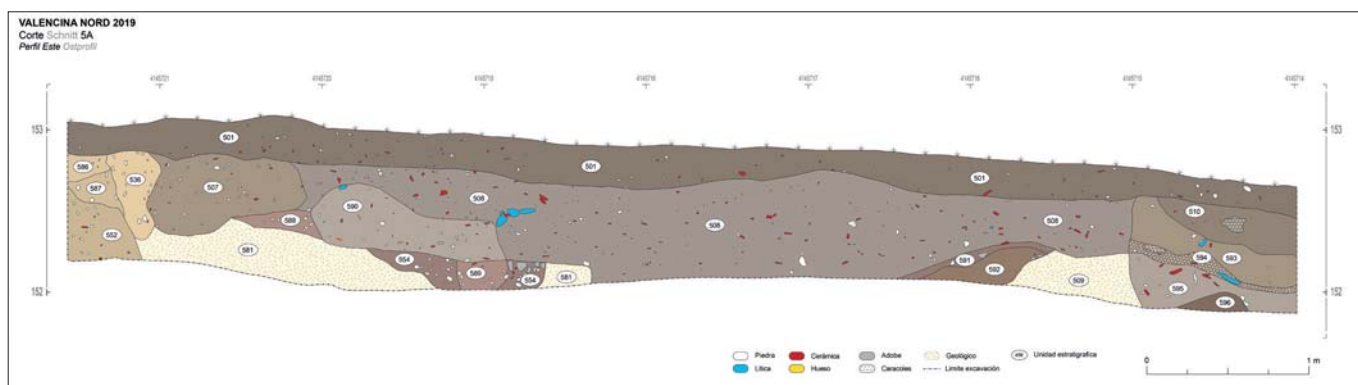


Fig. 10 – Eastern profile of trench 5A at the end of the excavation campaign 2019. Design: R. de Almeida.



Fig. 11 – Ditch 1 in trench 5A with accumulation of human bones at the end of the excavation campaign 2024.

Photo: A. Mederos, DAI Madrid.

enclosure can be reconstructed in the most complete way, as it can be completed thanks to both geophysics and with long stretches documented in several rescue excavations in the south and southeast of Valencia. The ^{14}C data of ditches 1 and 2 from the emergency excavation at Cerro de la Cabeza (1976) (CNA-1278 and CNA-1279; GARCÍA SANJUÁN et al., 2018, table 2; MEDEROS et al., 2023a, table 5) date their filling between 3000/2700 and 2700/2500 BC respectively, coinciding with dates from the ditches detected in the excavations of the Parcela Municipal La Pastora, Plan Parcial Matarrubilla (CNA-1099, CNA-1496, Ua-14.974 and Ua-19.475. NOCETE et al., 2008, p. 720 tab. 1; GARCÍA SANJUÁN et al., 2018, tab. 2; MEDEROS et al., 2023a, tab. 5) and Calle Bulería (2019; MAMS-45014).

Enclosure 5 thus separated the necropolis from the settlement area to the north, northwest, southeast and south. Therefore, geomagnetic prospecting in the Cerro Mármol area recently revealed a densely occupied necropolis covering an area of approximately 6 ha, adding to the already known necropolis to the southeast and south (SCHUHMACHER et al. 2024b, p. 56 Fig. 6) (Fig. 12).

In an early phase of the Final Chalcolithic (2550-2250 BC) a new shallower but wider ditch was excavated above its earliest phase (UC 504), enclosure 1 (MAMS-45995; MAMS-44996) (Figs. 7 and 8, in red). Ditches 3/5 (UC 513) and 2 (UC 509) also existed at this time and were finally filled in during the earliest (ditch 3/5) or latest (ditch 2) phase of the Late Chalcolithic (MAMS-44994; MAMS-44999). Presumably, the ditches from enclosure 5 had already ceased to function by this time, meaning that enclosure 1, newly created upon an ancient line of pits, signifies a gradual reduction of the settlement area after the Middle Chalcolithic ‘mega-settlement’ had reached its greatest extent with enclosure 5 (MEDEROS et al., 2023a, p. 282-283; SCHUHMACHER et al., 2024b, p. 114 Fig. 53, 115 Fig. 54).



Fig. 12 – Valencina de la Concepción. Magnetometer prospection 2022. Redrawing of the feature contours as part of the current interpretation of the measurement results on the digital terrain model. The recognisable burial monuments in blue. Design: N. Ostermeier.

Within the area bounded by enclosure 1 there was settlement activity, for example in the form of a possible workshop area (UC 463; MAMS-45003), which is overlain by enclosure 4, the most recent Late Chalcolithic enclosure (ditch 10) (UC 437). In addition, we found rubbish dumps with an accumulation of animal skulls (UC 310), a pit with the partial skeletal remains of a horse (UC 462) and the ritual deposition of a bovid skull on a pavement of ceramic fragments (UC 319) (MAMS-41094; MAMS-45000; MAMS-45002; ETH-112148; SCHUHMACHER et al. 2021, p. 135 Fig. 27) (figs. 13 and 14). A similar find was documented in 2022 in trench 5B (UC 506) (SCHUHMACHER et al., 2024b, p. 108 Fig. 50), although absolute dating is still lacking.

However, the rounded rectangular dwelling UC 446 (UE 468, UE 416, UE 439) is worth mentioning (SCHUHMACHER et al., 2021, p. 119, Fig. 15). The hut was built directly on the northern edge of the later ditch 10 (UC 437). Only its northern part has survived in the form of a small foundation trench in which adobe bricks and pieces of mud were found (MEDEROS et al., 2020, p. 323 Fig. 13, 325 Fig. 15; 2021, p. 309 Fig. 15). ¹⁴C data obtained from animal bones from this trench date its abandonment to 2600-2300 BC (ETH-110703; ETH-110704; ETH-110705; MAMS-45005). Although the stratigraphic situation is not entirely certain, the southern part of this house was probably destroyed by the construction of ditch 10 (Enclosure 4).

The monumental Enclosure 4 (UC 437; ditch 10) about 10 m wide and 8 m deep cuts across the Early Chalcolithic Enclosure 3 and only enclosed a small core of the large Middle Chalcolithic settlement, incorporating the upper end of the 'Los Pozos' stream valley with its source area (figs. 7 and 8, in black). The deepest infill layer of ditch 10 at the time of its abandonment dates to the earliest stages of the Late Chalcolithic

(between 26th to 25th centuries BC; MAMS-41654). Presumably it was created when enclosure 1 was still in use, but it outlived and gradually filled up over the course of the 25th to 22nd centuries BC (MAMS-42070). Enclosure 4 thus covered an area of approximately 20.7 ha and, although it consisted of only one ditch, its scale was comparatively monumental (MEDEROS et al., 2023a, p. 284-285; SCHUHMACHER et al., 2024b, p. 115 Fig. 54). Significantly, the distribution of the more than 1,600 decorated sherds of Bell Beaker pottery recovered at Valencina extends almost exclusively through the inner area of the Late Chalcolithic enclosure 4 that we have been able to reconstruct, making evident the connection between the occupation of the Bell Beaker phenomenon and the fortification of the more recent ditched enclosure (MEDEROS et al., 2021, p. 326 Fig. 24; SCHUHMACHER et al., 2024a, p. 355 Fig. 11) (Fig. 15).

It seems that after 2300/2250 BC all the ditches in Valencina were abandoned and refilled. The same phenomenon is perceived by the end of the third millennium BC in practically all the ditched enclosures of the Iberian Peninsula, especially in large aggregation centres such as Valencina (VALERA, 2015, p. 417; 419-422; VALERA, 2021). The explanations that have been put forward for this phenomenon and the reduction of settlements in size and number as well as population have been the climatic change summarised in the 4.2 ka BP event, the immigrations of populations with a steppe ancestry, or on the contrary a movement of populations from the peninsular Southwest to the Southeast (SCHIRRMACHER et al., 2020, p. 10-12). In fact, the archaeological data so far do not support either an immigration or a migration of populations towards the Southeast. And the impact of climate change on the Southwestern peninsula is still under discussion. We would like to discuss other factors for Valencina, but which also await confirmation, such as a depletion of arable land, erosion, although the latter is linked to climate change, or the possible existence of epidemics, caused by population aggregation and close coexistence with numerous animals (compare e.g. LÓPEZ-GIJÓN et al., 2024).

Other authors point to internal, social factors (VALERA, 2021). It is argued that the acceleration of the historical process visible during the third millennium BC may have caused pressure on the productive and technological bases that could not adapt at the same pace, leading to an imbalance. The development of extensive and intense exchange networks throughout the 3rd millennium for acquiring and consuming exotic products led to interdependence and vulnerability to problems and crises at any point in this network. Likewise, the increasing investment in monumentality, visible, for example, in enclosures or funerary monuments as a form of ideological staging could equally have caused imbalances in the system and problems in production capacity and the ability of leadership to muster the products and labour force necessary to maintain this level of monumentality. All these processes are equally related to a social competition between neighbouring societies



Fig. 13 – Fragment of an anthropomorphic idol of bone from the pit UC 310. Photo: M. Latova; D-DAI-MAD-MLA-DG-46-2024-008.



Fig. 14 – Valencina de la Concepción. Trench 3 during the excavation campaign of 2018. Pit UC 319 (UE323) with the deposit of the skull of an aurochs. Photo: Ch. Bashore; D-DAI-MAD-CBAS-DG-049-2018-360.

and their leaders. The inflation of monumentality and related labour as well as the dependence on exchange networks could have led to imbalances in the productive sphere, which was too weak to sustain these levels for a long time and made the system more vulnerable to external pressures such as the consequences of climate change, albeit more evident in other regions that were part of these exchange networks.

At the present time it seems that there is no single factor that explains the collapse of the social and cultural system and the abandonment of the large enclosures in the south of the Iberian Peninsula at the end of the third millennium BC, but rather a combination of causes.

In our opinion, working out the specific reasons for the emergence of megasites, we might also know discover the reasons for their decline. Because very specific factors (production, exchange networks, climate, etc.) were crucial for their emergence. When these factors disappeared or lost their exclusivity, the megasites might have fallen back to a lower level of organization.

Only in the southern part of Cerro de la Cabeza (UC 304; UE 416) between 2000-1800 BC, there is evidence of a small Early Bronze Age settlement, which apparently was not in direct continuity with the Late Copper Age settlement (MAMS-41099; ETH-112150) (MEDEROS et al., 2020, p. 331-333 Fig. 20). After a long hiatus, the site returned to use in the Late Bronze Age and Early Iron Age (8th-5th centuries BC). The finds (UE 317 in UC 313; UC 506) probably represent the remains of burial urns (MEDEROS et al., 2021, p. 305-306 Fig. 13; 2023a, p. 264 Fig. 23), as well as a pit with several successive layers suggesting a seasonal consumption of snails (UC 505) (SCHUHMACHER et al., 2021, p. 130 Fig. 24; 2024b, 105-106 Fig. 47-48; MEDEROS et al., 2023a, p. 262 Fig. 22) (Fig. 16). Other elements from this period were also documented, e.g. during the

emergency excavations for the construction of the ‘Pabellón Cubierto’ south of Cerro de la Cabeza, such as Phoenician red-slipped pottery (ORTEGA, 2013: 128-129 Fig. 10; VARGAS JIMÉNEZ, 2013: 553-555 Fig. 12).

5 – DOMESTIC STRUCTURES. HUTS

Some researchers point out that Valencina lacks huts, non-fragmented millstones found *in situ* and signs of production, e.g. examples of lithic tools, so they question whether it was a continuously inhabited settlement, and rather interpret it as a temporary, occasional or seasonal meeting place for the celebration of religious festivals and burial rites (GARCÍA SANJUÁN, 2013, p. 35; GARCÍA SANJUÁN et al., 2017, p. 250, 254; ESCACENA et al., 2018, p. 13, 17, 26 Fig. 2, 28 table 3; ARANDA et al., 2020, p. 16; STANISH et al., 2024).

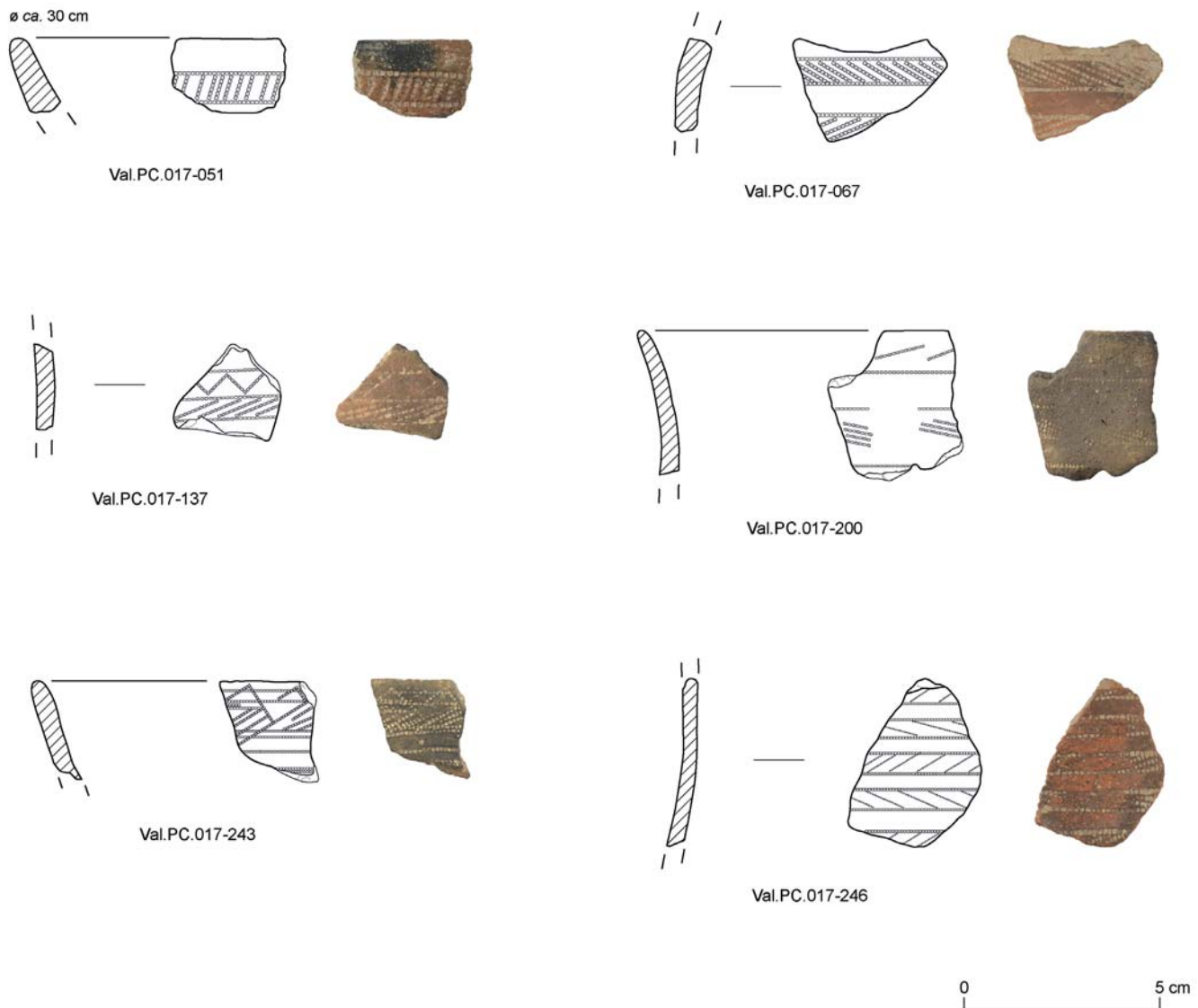


Fig. 15 – Maritime and impressed Bell Beakers from the excavation at the “Pabellón Cubierto” of Valencina de la Concepción, Structural Unit (UC) 133, Stratigraphic Unit (UE) 201. Design: R. de Almeida.

In our geomagnetic survey we documented hundreds of settlement pits in high density in central areas of the Chalcolithic settlement (e.g. Cerro de la Cabeza, Southern part of Cerro Mármol, Pozo Bueno), in our opinion indicate intensive and long-term occupation. The density of pits in the subsurface corresponds to large quantities of surface finds such as typical settlement material (ceramics, flint, millstones), but also production remains (rock, rock crystal, copper).

We have already published an article where we have defended the existence of huts in Valencina (SCHUHMACHER et al., 2019b). The idea that there were no huts in Valencina and therefore no stable population living there continuously is based in our opinion on two facts:

- 1) So far in Valencina no typical huts with a circular plan and stone foundations have been found, such as those known from the Iberian Chalcolithic fortified settlements with stone walls, such as Los Millares or Zambujal.
- 2) Some so-called poly-lobed structures have been published, interpreting them as huts, but in our opinion, they do not form a single contemporary structure, but are due to the erroneous interpretation of several successive overlapping structures.



Fig. 16 – Valencina de la Concepción 2024. Trench 5B. View north on pit UC 505 with an accumulation of snails. Photo: M. Sánchez; DAI Madrid.

In our excavations we generally found up to seven types of structures, which are differentiated by their architecture and the archaeological material found in them and their infill. We could distinguish rubbish dumps, pits, ritual deposits, truncated cone-shaped pits (silos?), semi-subterranean huts with a circular floor plan, rectangular huts with foundation trenches and semi-subterranean workshops with a circular floor plan, always referring to their last function (SCHUHMACHER et al., 2019a. 2019b. 2021. 2024a. 2024b; MEDEROS et al., 2020. 2021. 2023a) (Fig. 17).

For the purposes of this article, we will only discuss the structures defined as huts and workshops. In our excavation at the Cerro de la Cabeza we have been able to identify a minimum of five circular huts, all of them belonging to the Middle Chalcolithic phase (UC 447/448; UC 465; UC 301; UC 314 and UC 315) (figs. 18, 19 and 20). As a rule, they have a diameter of about 3.5 m and are dug into the geological subsoil reaching a depth of about 1 m. The infill sediment is characterised by the presence of a large amount of disinte-



Fig. 17 – Valencina de la Concepción. Aerial photo of trenches 3 and 4 at the end of the excavation campaign in 2024.
Photo: M. A. de Dios; DAI Madrid.



Fig. 18 – Valencina de la Concepción 2019. Trench 3: Planum 4 and profile of hut UC 301, showing the concentrations of disintegrated adobe, adobe fragments and archaeological finds above the floor of the hut. Photo: Ch. Bashore; D-DAI-MAD-CBAS-DG-46-2019-0021.

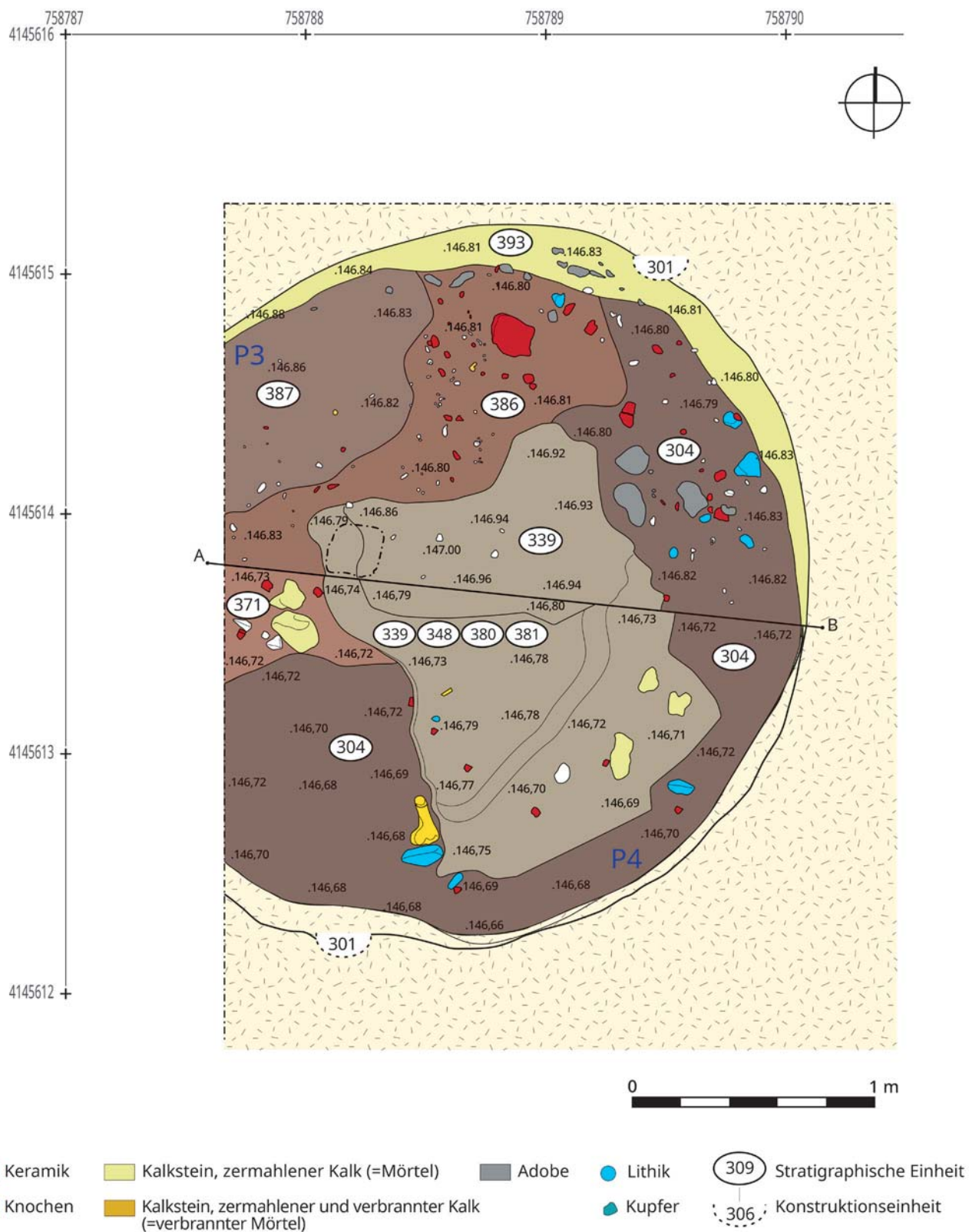


Fig. 19 – Valencina de la Concepción. Planum 3 and 4 of the hut structure UC 301 of trench 3. Design: R. de Almeida.



Fig. 20 – Aerial photo of the hut structure UC 465 of trench 4 at the ed of the excavation campaign 2024.
Photo: M. A. de Dios; DAI Madrid.

grated mud and mud fragments and adobe from the collapse of the walls and roof. On the floor of these structures, small adobe fragments or bricks are often found along their circumference of the structure together with limonite stones, which probably served as a base for the walls of the structure. Similar architectural features are found in some huts at the Chalcolithic site of Melgarejos (Getafe, Madrid) (DÍAZ-DEL-RÍO, 2021, Fig. 4) or the Polideportivo of Martos (Jaén) (LIZCANO PRESTEL, 1999, p. 83-85). Among the filling sediments, fragments of mud with plant imprints have been identified, certifying the use of the wattle-and-daub technique and adobe bricks (PASTOR et al., 2024). It is therefore confirmed that these are closed structures with walls and roofs. These structures also show a special soil preparation formed by a mixture of mud, limonite and crushed adobe with a thickness of about 5 cm. In many cases a first layer of ceramic artefacts, sometimes *in situ* containers, stone tools and some faunal remains are found above this layer and were later covered by the sediment infill (FERNÁNDEZ GÓMEZ & OLIVA ALONSO, 1986, p. 25 photo 1; VARGAS JIMÉNEZ, 2004, cat. Fig. 5; MURILLO DIAZ et al., 2006, Fig. 2; LÓPEZ ALDANA et al., 2001; VARGAS JIMÉNEZ, 2004, cat. no. 126-128). In general, among the archaeological material from these structures, there are few faunal fragments in comparison with the structures we define as rubbish dumps. They are mainly characterised by the presence of ceramic fragments and some flint and stone tools (figs. 21, 22 and 23). So-called sun-dried earthenware crescents are widely found in these hut structures, but scarcely found in other types, with the exception of the ditches. Since these artefacts are often interpreted as loom weights, this reinforces the idea that these are dwellings and that part of the textile manufacture took place in or near these huts or that the loom was usually stored inside them (CARDITO ROLLÁN, 1996; COSTEIRA, 2010/2011; BASSO RIAL et al., 2018).



Fig. 21 – Valencina de la Concepción 2024. Almost complete ceramic vessel from hut UC 314 in trench 3. Photo: M. Latova; DAI Madrid.



Fig. 23 – Valencina de la Concepción 2022. Trench 3. Zoomorphic vessel out of hut UC 314 in trench 3. Photos: M. Latova; a. D-DAI-MAD-MLA-DG-12-2023-200; b. D-DAI-MAD-MLA-DG-12-2023-208.



Fig. 22 – Crescent shaped ceramic object out of pit UC 317. Photo: M. Latova; D-DAI-MAD-MLA-DG-32-2019-175.



Similar structures appear frequently in other emergency excavations in Valencina, e.g. in Cerro de la Cabeza (1976), El Algarrobbillo (1991), Calle Alamillo/Calle TVE (1997) and more recently in the Nueva Biblioteca (FERNANDEZ GOMEZ & OLIVA ALONSO, 1986, p. 25 Fig. 1; SANTANA FALCÓN, 1993; LÓPEZ ALDANA et al., 2001; VARGAS JIMÉNEZ, 2004, cat. Fig. 5; cat. nos. 95-97; 126-128; MURILLO DIAZ et al., 2006, Fig. 2; VARGAS JIMÉNEZ et al., in press 2025) (Fig. 24).

The arguments used to dismiss these structures as semi-subterranean huts are usually the lack of hearths, postholes and *in situ* millstones (MÁRQUEZ ROMERO & JIMÉNEZ JÁIMEZ, 2010, p. 342-346; GARCÍA SANJUÁN, 2013, p. 35; GARCÍA SANJUÁN et al., 2017, p. 250, 254; ARANDA et al., 2020, p. 16).). In reality, at least in the case of El Algarrobbillo, the presence of hearths has been detected and the hut at Cerro de la Cabeza contains post holes designed to support the roof (Fig. 24). Also, in C/ Maestro Gabriel

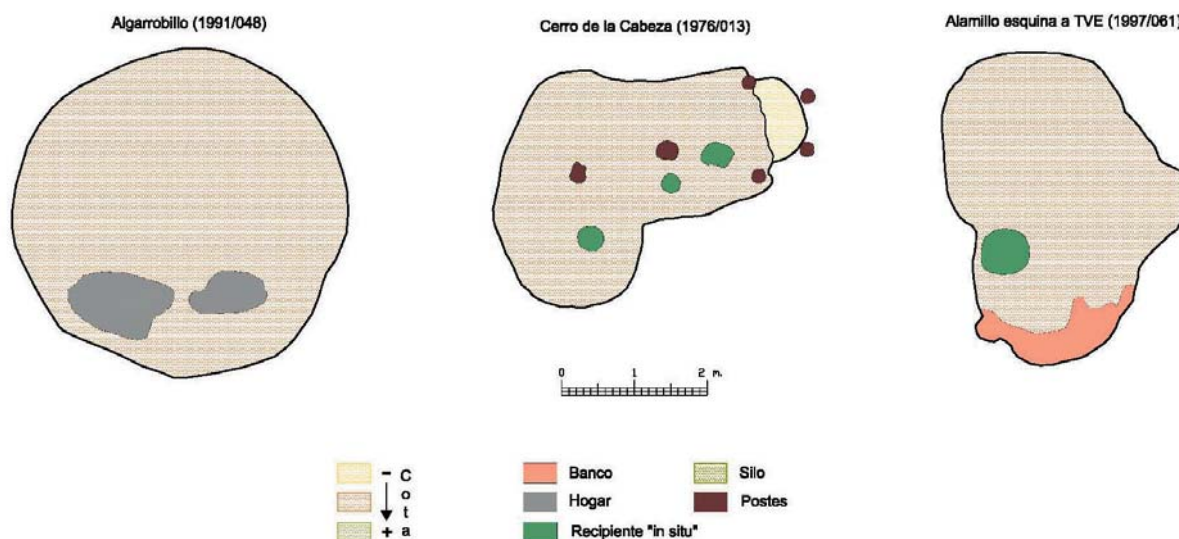


Fig. 24 – Valencina de la Concepcion. Dwelling structures from rescue excavations at the excavation sectors of (a) El Algarrobbillo, (b) Cerro de la Cabeza (1976), and (c) Calle Alamillo/Calle TVE parcels. Highlighted are postholes (brown), hearths (red), clay accumulations (orange), and ceramic containers in situ (dark green). Design: Th. Schuhmacher modified after Vargas 2004, Fig. 5.

nº 8, semicircular alignments of post holes have been detected which should have delimited circular huts with diameters of around 3 m, although given the limitations of the excavated site, only semicircles have been documented. Some are accompanied by small trenches lined with slate slabs and scattered sandstone blocks, which mark the outer perimeter of the huts. In this case, the only available dates point to the Late Chalcolithic (VALLS, 2012; VARGAS JIMÉNEZ et al., 2025).

The results of the geomagnetic survey as well as the excavation in the northern part suggest some structuring of the huts and other domestic structures, at least for the Middle Chalcolithic. Geomagnetism has detected throughout the northern sector that many of the structures are arranged in circles with a diameter of 20-25 m with an empty space in the centre (Fig. 4). According to the results of our excavations, these circles are formed by several huts, workshops and other contemporary pits. We therefore propose the existence of groups in which an extended family lived together, albeit spread over several huts and sharing a common space in the form of a courtyard in the centre. We assume that it is in this central space where daily activities such as cereal grinding were carried out. This would explain the lack of millstones *in situ* within the structures defined as huts. Due to heavy erosion, they would not have been preserved either in this central courtyard or elsewhere (MEDEROS et al., in press 2025).

Similar groups of dwellings grouped around open spaces have been documented e.g. in Marroquíes Bajos, although in an advanced phase of the Late Chalcolithic (ZAFRA, HORNOS & CASTRO, 1999, p. 85-86 Fig. 4, 94 Fig. 5). Other researchers suggest that the existence of courtyards or delimited and shared spaces is quite frequent in Chalcolithic settlements of the Southeast of the Iberian Peninsula, indicating their presence in Vilches IV (Hellín, Albacete), Los Millares (Almería) or El Malagón (Granada) (GARCÍA ATIÉNZAR & JOVER MAESTRE, 2020, p. 193-196). According to their interpretation, 'these would be large family groups that, at a productive level, would organise and carry out daily activities together, sharing a large part of the means of production, although at a reproductive level they could be organised as nuclear families'.

6 – PRODUCTION IN VALENCINA: THE WORKSHOPS

In our excavation at Cerro de la Cabeza we were able to identify three structures that we defined as workshops, all of them belonging to the Middle Chalcolithic (UC 444; UC 445; UC 316) (MEDEROS et al. 2023a, p. 248 Fig. 7, 250-251; SCHUHMACHER et al. 2024b, p. 91-92 Fig. 36, 97 -98 Fig. 41). It is interesting to note that the three workshops not only have the same chronology, although structures UC 444 and UC 445 overlap and are therefore successive, but that all four form, together with huts UC 301, UC 315 and UC 447/448 or UC 465, part of the same circle of structures, which we interpret as a space shared by an extended family.

The structures defined as workshops share architectural characteristics with the huts. They show the same floor and wall preparation and a large amount of disintegrated adobe found in their infill. They are also excavated approximately 1 m into the geological subsoil, although they have a smaller diameter than the huts, of about 2 m. The archaeological material found in the infill sediment and above ground differs significantly from that of the huts. There are fewer ceramic fragments, including crescents, but more faunal bones, in some cases especially horns, and more macrolithic tools, as well as lithic fragments in general. It is not entirely clear whether the work in question actually took place inside these structures, making them genuine workshops, or whether these structures served more as storage areas and production activities were carried out in the nearby courtyard-like space. The composition of the material found in these spaces defined as workshops is not always the same. Thus, in UC 316 we find several bovine horns and a deer antler together with macrolithic tools (SCHUHMACHER et al., 2021, p. 111 Fig. 9, 114 Fig. 12), while UC 444 and UC 445 stand out above all the other due to the large amount of rock crystal and basalt fragments found within (Fig. 25).



Fig. 25 – Valencina de la Concepción 2019. Trench 3. Planum 4 and profile of workshop UC 316, showing two of the large bovid horns, as well as other animal bones and macrolithic artefacts. Photo: Ch. Bashore; D-DAI-MAD-CBAS-DG-46-2019-0157.

The large amount of flint material, including bladelets, flakes, splinters and knapping debris, found in pit UC 501, UE 506 and 552 (MEDEROS et al., 2023a, p. 259, 261 Fig. 29a-b) shows that from the Late Neolithic/Early Chalcolithic phase flint was knapped and tools were made. This seems also to be the case for the pit UC 309, but we still lack a dating. In the following phases usually only finished flint tools, mainly blades and some arrowheads, are found, but almost no knapping remains (figs. 26 and 27). The results of the study of the Montelirio tomb indicate a great variety of different types of flint raw material used (GARCÍA SANJUÁN et al., 2016, p. 236-238). Since the Valencina environment lacks suitable material for flint knapping, flint is exclusively imported from different distant sources, such as Valle del Turón (Málaga), Milanos Formation (Granada and Jaén), Malaver Formation (Montecorto, Ronda, Málaga), Calañas and Andévalo (Huelva), “zona de cizalla Badajoz-Córdoba” and from the centre of the Ossa-Morena area (Monesterio Alpine Ridge). Studies of the knapped lithic material from our excavation are still in progress by J. Afonso and G. Martínez of the University of Granada, but it seems possible that while in the Late Neolithic/Early Chalcolithic flint tools were still being produced in Valencina in noticeable quantities, in the following phases the finished tools were imported directly. On the other hand, rock crystal and basalt were knapped in Valencina, at least during the Middle and Late Chalcolithic (Fig. 27). The large amount of production residues from basalt processing accompanied by numerous percussion stones and the general lack of finished products in the survey could indicate a decentralized series production of basalt axes for export.



Fig. 26 – Flint arrowhead of flint out of UC 506 in trench 5B.
Photo: M. Latova; D-DAI-MAD-MLA-DG-12-2023-105.



Fig. 27 – Flint blade from hut UC 314 in trench 3.
Photo: M. Latova; D-DAI-MAD-MLA-DG-12-2023-019.

The study of macrolithic artefacts has revealed very diverse life-sustaining activities such as grain milling, animal product processing, fibre work, pottery production, construction and craftsmanship throughout the Chalcolithic (EGUÍLUZ et al., 2023; EGUÍLUZ et al., in press 2025). The Valencina site shows a basic subsistence-oriented economy, adapted to the changing needs of the community over time. The raw material used for the manufacture of the macrolithic tools came from sources within a radius of 30 km.

The presence of metallurgical remains, including copper ore, slag and tools, scattered over a large part of the Valencina site, speaks in favour of the importance of the production of copper metal and tools at the Valencina site itself, despite the fact that copper objects were practically not part of the grave goods (GARCÍA SANJUÁN et al., 2016, p. 529). Production was not centralised, although perhaps more concentrated in the south, in the so-called metallurgical quarter during the Late Chalcolithic (NOCETE et al., 2008). However, this does not prevent the existence of certain significant areas of metallurgical work also during the Early and Middle Chalcolithic, as suggested by the archaeological survey carried out in the northern area, during which an accumulation of metallurgical objects has been detected between enclosures 5 and 8 and another related to enclosures 6 and 7 (SCHUHMACHER et al., 2024b, p. 83 f. Fig. 28), or Juan Ramón Jiménez Street (LÓPEZ ALDANA et al., 2025).

As we have already pointed out and taking into account the large number of crescents, interpreted as loom weights, textile production should have had an important place in Valencina and from the findings of the weights in the huts, it seems to have been a domestic production (CARDITO ROLLÁN, 1996; COSTEIRA, 2010/2011; BASSO RIAL et al., 2018; MEDEROS et al., 2023a, p. 250; SCHUHMACHER et al., 2024b, p. 85, 88, 103; ORTEGA & MEDEROS, 2025, p. 85 Fig. 4a-c). Recent faunal DNA analyses have shown that in some of the 4th and 3rd millennium BC sites investigated, such as Marinaleda and Grañena, the age and sex composition of the sheep flocks and their genetic closeness to present-day Merino sheep suggest that they were used for wool and/or milk production (ANAYA et al., 2024).

As far as ceramic production is concerned, although no ceramic kiln or production space has yet been found, we know from pottery analysis that part of the ceramic containers, including the analysed Bell Beaker ceramics, were produced with local clay, probably in Valencina itself (INÁCIO et al., 2012, p. 103-104; KIBAROĞLU et al., 2022; 2024, p. 17). However, another part, especially the plates and platters, one of the most frequent types, were produced with clays coming from sources located at a distance of 15-30 km (KIBAROĞLU et al., 2024, p. 16). Either the clay was imported to produce them locally, or the dishes were imported directly from the settlements located to the south of the Aljarafe or to the north-east and east of Valencina.

Although in our excavation we have only found a few small fragments, it is known that in Valencina ivory was also worked, which arrived in the form of raw material from North Africa and Asia. During emergency excavations at the site of the new Secondary School, a pit dated to the Early Chalcolithic was documented



Fig. 28 – Rock crystal blade from the first phase of ditch 1 (UC 517) in trench 5A.
Photo: M. Latova; D-DAI-MAD-MLA-DG-12-2023-083.

containing manufacturing remains, semi-fabricated objects and fragmented or discarded ivory objects, together with, among others, a copper saw (NOCETE et al., 2013, p. 1582-1583, Fig. 3-4; LUCIAÑEZ TRIVIÑO & GARCÍA SANJUÁN, 2016, p. 268; SCHUHMACHER, 2017).

7 – SUBSISTENCE

The site of Valencina has provided an enormous quantity of faunal remains. At present the collections from our excavations at Cerro de la Cabeza and the rescue excavations at the “Nueva Biblioteca” are still being studied by Rafael Martínez Sánchez and Santiago Guillamón Dávila of the University of Córdoba. The most complete sample studied is still that of the excavations in trenches A-C of La Perrera in 1975 and trenches C1-C11 and Da-Di of the Cerro de la Cabeza excavations in 1976 (HAIN, 1982), apart from some smaller samples from the excavations in C/ Mariana Pineda (PAJUELO PANDO & LÓPEZ ALDANA, 2013), La Gallega (BERNÁLDEZ SÁNCHEZ et al., 2013), Avenida de Andalucía 16 (SARDÁ PIÑERO, 2013) or sector IV of the Matarrubilla Partial Plan or ‘metallurgical quarter’ (ABRIL LÓPEZ et al., 2010). In all these collections, pig stands out as the most represented animal, both in terms of the number of remains and the minimum number of individuals. Pigs are followed by ovicaprines, with sheep predominating over goats. We have already seen that the data support a production not only of meat but also of wool and milk. The bovids seem to be the ones that provided the greatest amount of meat, although here too the presence of adult animals, both male and female, could indicate that they were also used for milk production and for transport and traction. Wild animals are very sparsely represented by deer, horses, aurochs and rabbits. Marine resources are also poorly represented, perhaps due to the lack of studies.

The scale of agriculture is still difficult to define. The number of archaeobotanical studies is still scarce (GARCÍA SANJUÁN, 2013, p. 36). Of the results of our research in this regard, analysed by E. Montes of the University of Jaén, only a small preliminary report has been published so far (MEDEROS et al., 2019). The amount of botanical remains is scarce, despite the fact that a large volume of sediment extracted from the different structures and pits has been floated in our excavation, as the preservation of botanical remains is bad. The carpological remains recovered correspond mostly to fragments of cereal, naked barley (*Hordeum vulgare* var. *nudum*) and common wheat (*Triticum aestivum/durum*). Fragments of leguminous plants have also been documented which have not been identified beyond the family to which they belong and some remains of *Pisum sativum* (pea).

Attention has been paid to grinding tools, of which Francisco Martínez-Sevilla et al. (2020) studied 185 from seven emergency excavations in Valencina de la Concepción. They observed a high degree of fragmentation of these artefacts and a high percentage with signs of thermal alteration. They also indicate that no millstones were found *in situ*. Especially the traces of use detected on the 92 millstones with a flat active surface were compatible with the grinding of cereals. The authors then confirmed the existence of cereal milling at Valencina, but concluded that the fact that fragmentary millstones were deposited and no whole millstones were found *in situ* was due to the fact that Valencina was a site of periodic gatherings of people and not a permanent settlement. However, more recent systematic excavations have documented whole millstones at Cerro de la Cabeza in sectors 3 and 5A (SCHUHMACHER et al., 2021, p. 117 Fig. 14; 2024b, p. 94 Fig. 38; 104 Fig. 46; MEDEROS et al., 2023a, p. 252 Fig. 12a-b) (Fig. 29).

The study of the macrolithic artefacts from our excavation at Cerro de la Cabeza as well as from the emergency excavation at the Pabellón Cubierto de Valencina has been carried out by Marina Eguiluz et al. (2023;



Fig. 29 – Valencina de la Concepción 2022. Trench 5A. Grinding stone found in pit UC 515.
Photo: Th. Schuhmacher; D-DAI-MAD-SCHT-DG-53-2022-399.

in press 2025), Autonomous University of Barcelona. So far, 111 grinding artefacts have been documented at Cerro de la Cabeza, of which 26 are millstones, the rest being “manos” -grinder, rubber- or unclassifiable fragments. Some 45% of the grinding artefacts were found in the sediments filling the structures that we define as huts or workshops, but not *in situ*. According to this study, cereal grinding was a primary activity throughout the Chalcolithic, although with changes in its intensity in relation to population size. The Valencina site had a subsistence-oriented economy, adapted to the changing needs of the community over time. The results support its characterisation as a complex settlement from an early date, rejecting its interpretation as a temporary gathering place.

The analysis of phytoliths carried out by E. Fernández-Palacios, University of La Laguna, of a millstone extracted during our excavation campaign at Cerro de la Cabeza did indeed indicate the presence of gramineas (MEDEROS et al., in press) (Fig. 30). Therefore, it seems clear that agriculture played an important role in Valencina, compatible with a stable settlement, but the intensity of agriculture remains difficult to determine. The available results of stable isotopes of carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) in the bone collagen of human remains from the Montelirio tholos suggest a diet based mainly on C3 terrestrial resources, such as cultivated cereals and derived animal proteins sources such as milk and dairy, but with a predominance of the former (FONTANALS COLL et al., 2015; FONTANALS-COLL et al., 2017, p. 446 f.). However, there are two women who showed higher meat consumption, perhaps due to a higher social status. Subsistence was therefore based on agriculture and livestock, with hunting as an occasional resource. There is no isotopic evidence of marine or freshwater fish or shellfish consumption, but it should be noted that the sample analysed and published is still very small.



Fig. 30 – Valencina de la Concepción. Grinding stone broken into two fragments from pit UC 318 in trench 3.
Photo: M. Latova; D-DAI-MAD-MLA-DG-12-2023-277B.

8 – ORIGIN OF RAW MATERIALS AND EXCHANGE

As we have already seen, many of the materials used and transformed into tools and objects arrived in Valencina from medium or long distances. The raw materials for macrolithic tools, with the exception of meta-arkosa, were available in the immediate vicinity of the settlement or in the region within a radius of up to 30 km (EGUÍLUZ et al., in press 2025). The same is observed, for example, in relation to clay for pottery production (KIBAROĞLU et al., 2022, 2024) and building materials for the monumental tombs, case of quartz-arenites 30 km to the north and Neogene sandstones 20 km to the south in the case of the La Pastora tomb (VARGAS JIMÉNEZ et al., 2019, p. 117).

The flint that was not found in the vicinity of the site came from distances of between 70 and 200 km (RAMOS MUÑOZ, 1991-92; GARCÍA SANJUÁN et al., 2016, 237 Fig. 39). Also, the rock crystal that was cut at the site had to be imported from considerable distances (MORGADO et al., 2015; GARCÍA SANJUÁN et al., 2016, p. 233 f.).

A lead isotope analysis carried out on samples of copper ore from the excavation of the ‘metallurgical quarter’ of Valencina has detected, still very generically, three sources for the copper ore transformed into metal at the site itself. The first one originating in the northwest and north of Valencina, at a distance of 20-30 km from the Iberian pyrite belt, a second one from southern Portugal, and a third one, which could not be precisely identified, but which must be more than 30 km away (NOCETE et al., 2008, p. 723).

Metal objects rarely appear in tombs, on the other hand there is a great quantity of metallurgical remains in the site of Valencina. There are two possible and at the same time opposite explanations for this fact. One is that the extent of metal production in the Early and Middle Chalcolithic was very low and of very little

economic and social importance (COSTA CARAMÉ, 2013, p. 465-466). The other explanation is just the opposite, copper objects were produced in relatively large quantities and almost exclusively in the form of functional objects such as awls, saws, axes and perhaps ingots in the form of axes for exchange. Thus, Nocete and his collaborators postulated a large-scale metallurgical production (NOCETE et al., 2008), although their arguments are questionable (GARCÍA SANJUÁN, 2013, p. 43-46; ROVIRA, 2016, p. 59-63).

Especially in the larger and more complex tombs of Valencina we can find very sophisticated objects made of exotic raw materials such as gold, ivory, ostrich eggshell, rock crystal, variscite and amber, apart from pottery and flint objects, which came from medium or even long-distance or extrapeninsular sources, including North Africa, Sicily and the Near East (HUNT ORTIZ & HURTADO PÉREZ, 2010; ROGERIO CANDELERIA et al., 2013; GARCÍA SANJUÁN, 2013; GARCÍA SANJUÁN et al., 2013; NOCETE et al., 2013; CRUZ-AUÑÓN & MEJÍAS, 2013; ODRIOZOLA & GARCÍA SANJUÁN, 2013; MURILLO-BARROSO & GARCÍA SANJUÁN, 2013; MORGADO et al., 2015; MURILLO-BARROSO, 2016a, 2016b; FERNÁNDEZ FLORES et al., 2016; LUCIAÑEZ TRIVIÑO & GARCÍA SANJUÁN, 2016, p. 268; GARCÍA SANJUÁN, 2017; SCHUHMACHER, 2017, 2022).

In any case, it is clear that in the Early and Middle Chalcolithic high status or prestige is marked by exotic objects such as e.g. ivory (GARCÍA SANJUÁN, 2013, p. 42-50; GARCÍA SANJUÁN et al., 2013; SCHUHMACHER, 2017, 2022). In our opinion, this could indicate the crucial importance of the exchange networks and knowledge of foreign lands that these societies had. The fact that the number of metal objects recorded in the most important Chalcolithic sites is low and hardly appears in the tombs, as is the case in Valencina, could be explained by the importance they had as exchange products (SCHUHMACHER, 2022; compare GAUß, 2015, p. 277-230). This could be illustrated e.g. by the metal objects exported to the Maghreb from the Iberian Peninsula (SCHUHMACHER, 2017; MEDEROS et al., 2023b) in exchange for ivory. Since copper was easy to obtain and only used for tools, it was little appreciated in an ideological-social context.

L. García Sanjuán also put to debate whether the establishment and evolution of Valencina as the centre of a vast network of exchanges, from the last third of the IV millennium BC, was not partly the result of the exploitation and trade of marine salt (GARCÍA SANJUÁN, 2017, p. 251), because of its situation in a marine environment and the location of a salt exploitation centre in Las Marismillas (La Puebla del Río, Seville) (ESCACENA & GARCÍA RIVERO, 2019). We do not exclude this possibility, although no evidence of salt production has yet been found in Valencina or its immediate surroundings.

It should also be considered that the animals themselves that were raised in abundance in Valencina and their products, be it meat, ham, dairy products, wool or textile products may have served for intensive exchange (PAJUELO & LÓPEZ ALDANA, 2013, p. 452-454; GARCÍA SANJUÁN, 2017).

9 – CONCLUSION

The site of Valencina de la Concepción is part of the phenomenon of ditched enclosures, which in the Iberian Peninsula became a relevant part of prehistoric research and investigation since the 1970s (DÍAZ-DEL-RÍO, 2003; MÁRQUEZ ROMERO & JIMÉNEZ JÁIMEZ, 2010; VALERA, 2013; GARCÍA SANJUÁN, 2013; SCHUHMACHER et al., 2015; 2019b; 2024b; VALERA, 2015; MEDEROS et al., 2016; 2023a; JIMÉNEZ JÁIMEZ et al., 2025) (Fig. 31). The size of most of the ditched enclosures is between 15 and 30 ha. Among them we find some ‘mega-sites’ such as Porto Torrão in Alentejo with an area of 75-100 ha, La Pijotilla (Extremadura) with 80 ha, Marroquies Bajos (Jaén) with 113 ha or Valencina de la Concepción with ca. 180 ha.

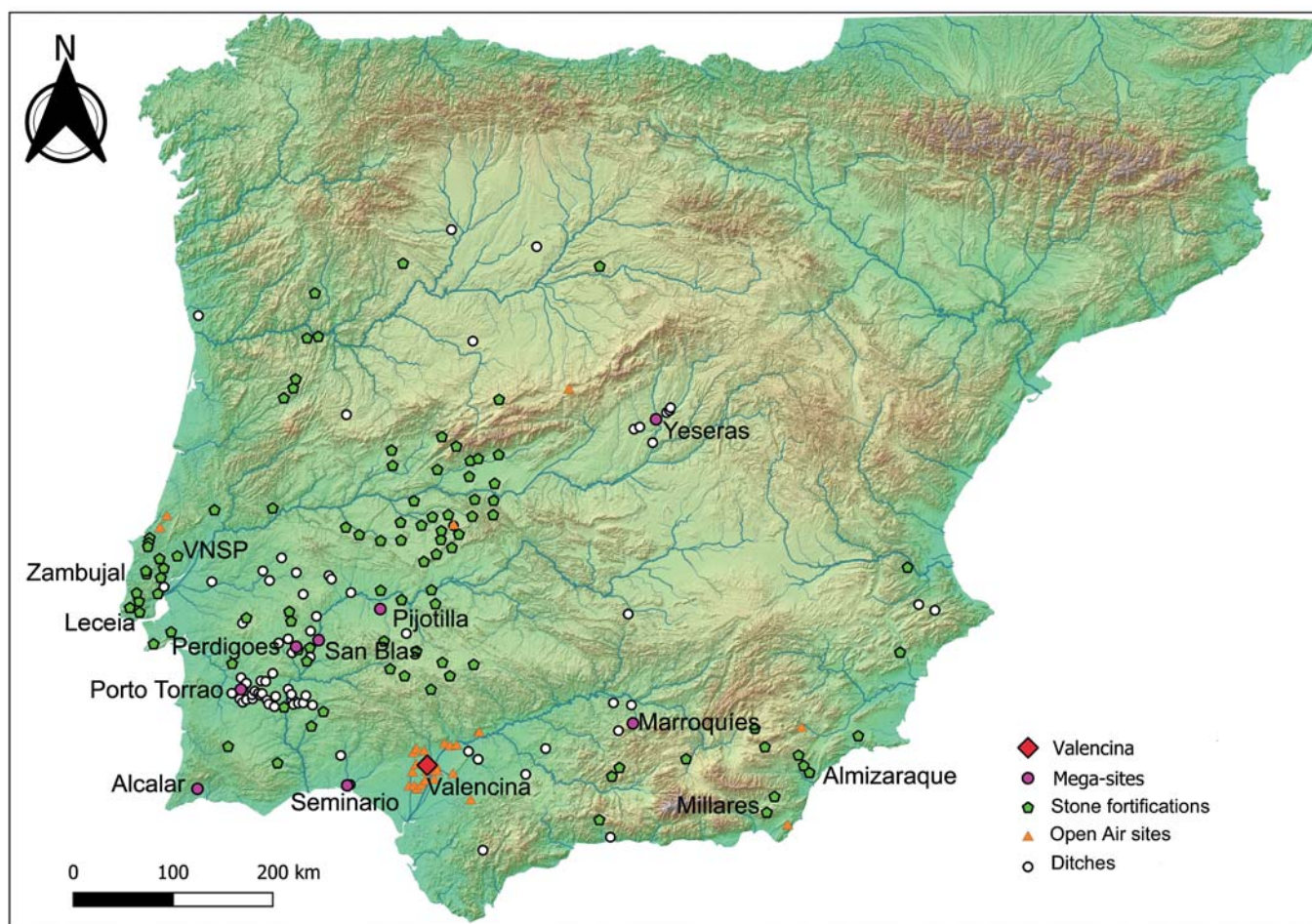


Fig. 31 – Map showing Chalcolithic sites with stone fortification, ditched enclosures and mega sites. Design: Ch. Bashore.

However, there is a significant variability in the size, shape and architecture of the enclosures, so it cannot be expected that all of them have the same chronology, the same function or the same social role. In the case of Valencina de la Concepción we are sure that it is a settlement occupied continuously from the end of the 4th millennium to the end of the 3rd millennium B.C. It seems reasonable to assume that, like other “mega-sites”, it came to aggregate a large number of people.

Especially in the larger and more complex tombs of Valencina we can find very sophisticated objects made of exotic raw materials such as gold, ivory, ostrich eggshells, rock crystal, variscite and amber, apart from ceramics and flint objects (GARCÍA SANJUÁN, 2013; 2017; GARCÍA SANJUÁN et al., 2013; CRUZ-AUÑÓN & MEJÍAS, 2013; MORGADO et al., 2015; FERNÁNDEZ FLORES et al., 2016; SCHUHMACHER, 2017; 2022). On the other hand, copper objects are quite scarce in both tombs and in the settlement itself, despite the large amount of metallurgical remains recovered from different areas of the site. Undoubtedly, these complex funerary monuments and the grave goods found in some of them suggest regional and interregional exchange and remarkable social complexity, although the extent and type of social complexity is still highly debated.

The proposal for the Final Chalcolithic and Early Bronze Age of the Upper Guadalquivir of a tributary system in a state organization based on coercion to obtain obedience (NOCETE CALVO, 1989), was later

also applied to other areas of the southern Iberian Peninsula, including the Lower Guadalquivir (ARTEAGA MATUTE & CRUZ-AUÑÓN BRIONES, 1999; NOCETE CALVO, 2001; LÓPEZ ALDANA & PAJUELO PANDO, 2001; NOCETE CALVO et al., 2008). Thus, the Valencina site has been interpreted as a centre of power that coercively controlled smaller communities within its territory, with an elite forcing these peripheral centres to transfer part of their production in the form of tribute.

Other researchers harshly criticized this view and concluded that in Valencina at the beginning of the Chalcolithic there was a growing social complexity with greater social inequality and more hierarchical forms of institutional organization, but not a state system (GARCÍA SANJUÁN & MURILLO BARROSO, 2013), defining the Chalcolithic society as a “communal ranked society”, where the position of each individual was established in relation to his proximity by descent to a founding ancestor (GARCÍA SANJUÁN et al., 2018b, p. 322).

In parallel, they have been described as “cooperative affluent societies”, where far-reaching exchange networks were not intended to create individual enrichment but collective wealth and at the same time increase the prestige of the people who participated and organized this exchange (RISCH, 2018).

Many resources were invested in the construction of large monuments, whether tombs, enclosures or fortifications and the production of objects with a high symbolic value that were exchanged in social networks of exchange and communication (compare STANISH et al., 2024). Although we can identify an elite or, at least, some extraordinary individuals or families with great prestige expressed through symbolic objects, so far it has not been possible to identify any singular building that served as the residence of this elite and there are no burials of children with rich grave-goods (SCHUHMACHER, 2022). However, at the same time, the organizers and others involved in these transactions obtained more prestige and power, expressed through symbolic objects. On the other hand, also some religious or other specialists were able to exhibit such symbols of power (compare e.g. FERNÁNDEZ FLORES et al., 2016; GARCÍA SANJUÁN et al., 2025).

Although Valencina was subject to changes in its extension, its dimensions suggest that it may have played an important role as the settlement of a large population, acting as a central place controlling the mouth of the Lower Guadalquivir, as well as a production centre and exchange gateway, due to its proximity to the sea, of exotic products and goods, such as copper, flint, rock crystal, basalt, variscite, cinnabar, amber and ivory to be processed, consumed and traded in it, also functioning as a funerary and ritual space of reference for a wide region.

REFERENCES

- ABRIL LÓPEZ, D.; NOCETE CALVO, F.; RIQUELME CANTAL, J. A.; RODRÍGUEZ BAYONA, M. & INÁCIO, N. (2010) – Zooarqueología del III milenio a.n.e.: El barrio metalúrgico de Valencina de la Concepción (Sevilla). *Complutum*, 21 (1), p. 87-100.
- ANAYA, G.; GARRIDO, J.M.; RIQUELME, J.A.; MARTÍNEZ, R.M.; MEMBRILLO, A.; CARO, J.A.; PAJUELO, A.; RUIZ, A.; MARTÍN DE LA CRUZ, J.C. & MOLINA, A. (2024) – Ancient DNA Reveals the Earliest Evidence of Sheep Flocks During the Late Fourth and Third Millennia BC in Southern Iberia. *Animals*, 14, 3693. <https://doi.org/10.3390/ani14243693>
- ARANDA, G.; CAMALICH, M^a.D.; MARTÍN SOCAS, D.; DÍAZ-ZORITA, M.; HAMILTON, D. & MILESI, L. (2020) – New Insights into the Radiocarbon Chronology of Iberian Megalithic Societies: The tholos-type Tombs

- of Mojácar (Almería, Spain). *European Journal of Archaeology*, 23 (4), p. 1-23. DOI: <https://doi.org/10.1017/eea.2020.41>
- ARTEAGA, O. & ROOS, A.-M. (1995) – Geoarchäologische Forschungen im Umkreis der Marismas am Río Guadalquivir (Niederandalusien). *Madridrer Mitteilungen*. 36, p. 199-218.
- ARTEAGA MATUTE, O. & CRUZ-AUÑÓN, R. (1999) – El sector funerario de Los Cabezuelos (Valencina de la Concepción, Sevilla). Resultados preliminares de una excavación de urgencia. *Anuario Arqueológico de Andalucía/1995*. III. Sevilla: Junta de Andalucía, p. 589-600.
- ARTEAGA, O.; SCHULZ, H. D. & ROOS, A.-M. (1995) – El problema del ‘Lacus Ligustinus’. Investigaciones geoarqueológicas en torno a las Marismas del Bajo Guadalquivir. In *Tartessos 25 años después 1968-1993. Actas del Congreso Conmemorativo del V Symposium Internacional de Prehistoria Peninsular* (Jerez de la Frontera 1993). Jerez de la Frontera, p. 99-135
- ARTEAGA, O.; BARRAGÁN, D.; ROOS, A.-M. & SCHULZ, H. D. (2016) – El proyecto geo-arqueológico “Puerto de Itálica”. *Revista Atlántica-Mediterránea de Arqueología Social*, 18, p. 75-109.
- BARRAGÁN MALLOFRET, D. (2024) – Holocene Coastline Evolution in the Northern Area of the Guadalquivir Palaeoestuary. *Cuadernos de Prehistoria y Arqueología de la Universidad Autónoma de Madrid*, 50 (2), p. 11-63. <https://doi.org/10.15366/cupauam2024.50.2.001>.
- BASSO RIAL, R.; NAVARRO CAÑIZARES, F. & GARCÍA ATIENZAR, G. (2018) – Nuevos datos sobre la producción textil durante el Calcolítico: los conjuntos de pesas de telar de Vilches IV (Hellín, Albacete). *Archivo de Prehistoria Levantina*, 32, p. 39-56.
- BERNÁLDEZ-SÁNCHEZ, E.; BERNÁLDEZ-SÁNCHEZ, M. & GARCÍA VIÑAS, E. (2013) – ¿“Campos de hoyos”, campos de compost? Estudio tafonómico y pelobiológico del sector de la Gallega en el yacimiento de Valencina de la Concepción (Sevilla). In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J.M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN BRIONES, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 421-443.
- BLANCO GONZÁLEZ, A.; LILLIOS, K.T.; LÓPEZ SÁEZ, J.A. & DRAKE, B.L. (2018) – Cultural, Demographic and Environmental Dynamics of the Copper and Early Bronze Age in Iberia (3300–1500 BC): Towards an Interregional Multiproxy Comparison at the Time of the 4.2 ky BP Event. *Journal of World Prehistory*, 31 (1), p. 1–79. <https://doi.org/10.1007/s10963-018-9113-3>
- BORJA BARRERA, F. (2013) – La desembocadura del Guadalquivir en la segunda mitad del Holoceno. Síntesis paleogeográfica. In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J.M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 93-112.
- CARDITO ROLLÁN, L. M. (1996) – Las manufacturas textiles en la Prehistoria: las placas de telar en el Calcolítico peninsular. *Zephyrus*, 49, p. 125-145.
- CINTAS-PEÑA, M.; LUCIAÑEZ TRIVIÑO, M.; MONTERO ARTÚS, R.; BILECK, A.; BORTEL, P.; KANZ, F.; REBAY-SALISBURY, K. & GARCÍA SANJUÁN, L. (2023) – Amelogenin peptide analyses reveal female leadership in Copper Age Iberia (c. 2900-2650 BC), *Scientific Reports*, 13, 9594. <https://doi.org/10.1038/s41598-023-36368-x>
- COLLANTES DE TERÁN, F. (1969) – El dolmen de Matarubilla. In *V Symposium Internacional de Prehistoria Peninsular* (Jerez de la Frontera, 1967). Barcelona: Universidad de Barcelona, p. 47-61.
- COSTA CARAMÉ, M. E. (2013) – La actividad metalúrgica en Valencina de la Concepción (Sevilla): Problemática y situación actual de investigación. In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J.M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción*

- (Sevilla). Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora. Sevilla: Universidad de Sevilla. p. 459-468
- COSTEIRA, C. (2010/2011) – Placas e crescentes. Análise de um conjunto de componentes de tear do sítio arqueológico de S. Pedro (Redondo, 3º milénio a.n.e.). *Arqueologia e História*, 62/63, p. 23-37.
- CRUZ-AUÑÓN, R. & MEJÍAS GARCÍA, J. C. (2013) – Diversidad de prácticas funerarias e identidades en el asentamiento de Valencina de la Concepción (Sevilla). In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 175-199.
- DÍAZ-DEL-RÍO, P. (2003) – Recintos de fosos del III milenio AC en la Meseta peninsular. *Trabajos de Prehistoria*, 60 (2), p. 61-78.
- DÍAZ-DEL-RÍO, P. (2021) – ¿Qué sucedió en la Edad del Cobre? *BSAA Arqueología*, 87, p. 164-241.
- DORADO, A.; BASSO, R.; CASTILLO, F.J.; PÉREZ L'HUILLIER, D.; GARCÍA MARTÍNEZ, M.V.; ALCARAZ, F.M.; MALDONADO, A.; QUERO, A.; NÚÑEZ, H.A.; BELTRÁN, A.; TINOCO, L.; PEÑA, J.A.; SPANEDDA, L.; MARTÍNEZ, G.; AFONSO, J.A.; CONTRERAS, F.; MOLINA, F. & CÁMARA, J.A. (2024) – Primeros resultados de la segunda fase del 'Proyecto Millares' (campaña de 2023). *Cuadernos de Prehistoria y Arqueología de la Universidad de Granada*, 34: 291-354.
- EGUÍLUZ, M.; DELGADO-RAACK, S. & RISCH, R. (2023) – The Strength of Diversity. Macrolithic Artefacts and Productive Forces During the Chalcolithic of Southern Iberia. *Journal of World Prehistory*, 36, p. 191-225.
- EGUÍLUZ, M.; RISCH, R.; MEDEROS, A.; FALKENSTEIN, F. & SCHUHMACHER, Th. X. (e.p. 2025) – Economy of a long-term Chalcolithic ditched enclosure: analysis of the macrolithic tool assemblage of Valencina de la Concepción (Sevilla, Spain). *Journal of Archaeological Science Reports*.
- ESCACENA, J.L. & GARCÍA RIVERO, D. (2019) – Producción neolítica de sal marina en La Marismilla (La Puebla del Río, Sevilla). Datos renovados e hipótesis complementarias. *Lucentum*, 38, p. 9-26.
- ESCACENA, J.L.; ROLDÁN, I. & FLORES, M. (2018) – El gran cementerio. Hacia una nueva interpretación de la Valencina calcolítica. *Cuadernos de Prehistoria y Arqueología de la Universidad Autónoma de Madrid*, 44, p. 11-34. <http://dx.doi.org/10.15366/cupauam2018.44.001>
- FERNÁNDEZ FLORES, Á.; GARCÍA SANJUÁN, L. & DÍAZ-ZORITA, M. (eds.) (2016) – *Montelirio. Un gran monumento megalítico de la Edad del Cobre*. Sevilla: Junta de Andalucía.
- FERNÁNDEZ GÓMEZ, F. (2013) – Las excavaciones del Museo Arqueológico de Sevilla en Valencina de la Concepción (Sevilla) en 1975-1976: Sectores de La Perrera, La Candelera y Cerro de la Cabeza. In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 131-150.
- FERNÁNDEZ GÓMEZ, F. & RUIZ MATA, D. (1978) – El Tholos del Cerro de la Cabeza, en Valencina de la Concepción (Sevilla). *Trabajos de Prehistoria*, 35, p. 193-221.
- GARCÍA ATIÉNZAR, G. & JOVER MAESTRE, F. J. (2020) – Áreas de actividad, unidades habitacionales, asentamiento y espacio social: a propósito del poblado de Vilches IV. In GARCÍA ATIÉNZAR, G. & BUSQUIER CORBÍ, J.D. (eds.), *El Poblado Calcolítico de Vilches IV (Torre Uchea, Hellín. Albacete). Un asentamiento del III milenio ac en la Submeseta sur*. Alicante: Publicacions de la Universitat d'Alacant, p. 181-201.
- FONTANALS COLL, M.; DÍAZ ZORITA, M. & SUBIRÁ, M. E. (2015) – A Palaeodietary Study of Stable Isotope Analysis from a High-Status Burial in the Copper Age. The Montelirio Megalithic Structure at Valencina de

- la Concepción-Castilleja de Guzmán, Spain. *International Journal of Osteoarchaeology*, 26 (3), p. 447-459, <http://onlinelibrary.wiley.com/doi/10.1002/oa.2435/pdf>
- FONTANALS COLL, M.; DÍAZ ZORITA, M. & SUBIRÁ, M. E. (2016) – Análisis de isótopos estables de los restos humanos de Montelirio. In FERNÁNDEZ FLORES, Á., GARCÍA SANJUÁN, L. & DÍAZ-ZORITA, M. (eds.) (2016) – *Montelirio. Un gran monumento megalítico de la Edad del Cobre*. Sevilla, p. 443-448.
- GARCÍA SANJUÁN, L. (2013) – El asentamiento de la Edad del Cobre de Valencina de la Concepción: Estado actual de la investigación, debates y perspectivas. In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 21–59.
- GARCÍA SANJUÁN, L. (2017) – Farming economy and wealth economy in the Copper Age of the Lower Guadalquivir River: Debating strategic resources at Valencina de la Concepción (Seville, Andalusia, Spain). In BARTELHEIM, M., BUENO, P. & KUNST, M. (eds.), *Key Resources and Socio-Cultural Developments in the Iberian Chalcolithic*. Tübingen: Ressourcen Kulturen, 6, p. 237-256.
- GARCÍA SANJUÁN, L. & MURILLO BARROSO, M. (2013) – Social Complexity in Copper Age Southern Iberia (ca. 3200-2200 cal. BC). Reviewing the State Hypothesis at Valencina de la Concepción (Seville, Spain). In BERROCAL, M. C., GARCÍA SANJUÁN, L., GILMAN, A. (eds.), *The Prehistory of Iberia. Debating the Early Social Stratification and the State*. New York: Routledge, p. 119-140.
- GARCÍA SANJUÁN, L.; LUCIÁÑEZ TRIVIÑO, M.; SCHUHMACHER, TH. X.; WHEATLEY, D. & BANERJEE, A. (2013) – Ivory craftsmanship, trade and social significance in the southern Iberian Copper Age: the evidence from the PP4-Montelirio sector of Valencina de la Concepción (Seville, Spain). *European Journal of Archaeology*, 16 (4), p. 610-635.
- GARCÍA SANJUÁN, L.; LOZANO, J. A.; SÁNCHEZ LIRANZO, O.; GIBAJA, J. & ARANDA SÁNCHEZ, V. (2016) – La industria lítica del tholos de Montelirio, In FERNÁNDEZ FLORES, Á., GARCÍA SANJUÁN, L. & DÍAZ-ZORITA, M. (eds.), *Montelirio. Un gran monumento megalítico de la Edad del Cobre*. Sevilla: Junta de Andalucía, p. 203-244
- GARCÍA SANJUÁN, L.; RAMÍREZ-CRUZADO, S.; DÍAZ-GUARDAMINO, M.; LOZANO RODRIGUÉZ, J.A.; DONAIRE ROMERO, T.; AFONSO VARGAS, J.A.; RODRÍGUEZ-RELLÁN, C.; BALSERA NIETO, V.; CÁCERES PURO, L.M.; WHEATLEY, D.W.; EARLE, T.; CINTAS-PEÑA, M.; VARGAS JIMÉNEZ, J.M.; FERNÁNDEZ FLORES, Á.; LUCIÁÑEZ TRIVIÑO, M.; CÁRDENAS-PÁRRAGA, J.; MARTÍNEZ MERINO, M. & MUÑIZ GUINEA, F. (2025) – A multi-analytical study of the Montelirio beaded attires: Marine resources, sumptuary crafts, and female power in copper age Iberia, *Science Advances* 11, eadp 1917.
- GARCÍA SANJUÁN, L.; SCARRE, CH. & WHEATLEY, D. W. (2017) – The Mega-Site of Valencina de la Concepción (Seville, Spain): debating settlement form, monumentality and aggregation in southern Iberian Copper Age societies. *Journal of World Prehistory*, 30 (3), p. 239-257. <http://dx.doi.org/10.1007/s10963-017-9107-6>.
- GARCÍA SANJUÁN, L.; VARGAS, J.M.; CÁCERES, L.M.; COSTA CARAMÉ, M.E.; DÍAZ GUARDAMINO, M.; DÍAZ ZORITA, M.; FERNÁNDEZ FLORES, A.; HURTADO, V.; LÓPEZ ALDANA, P.M.; MÉNDEZ, E.; PAJUELO, A.; RODRÍGUEZ VIDAL, J.; WHEATLEY, D.; BRONK RAMSEY, C.; DELGADO-HUERTAS, A.; DUNBAR, E.; MORA, A.; BAYLISS, A.; BEAVAN, N.; HAMILTON, D. & WHITTLE, A. (2018) – Assembling the Dead, Gathering the Living: Radiocarbon Dating and Bayesian Modelling for Copper Age Valencina de la Concepción (Seville, Spain). *Journal of World Prehistory*, 31 (2), p. 179-313. <http://dx.doi.org/10.1007/s10963-018-9114-2>
- GARCÍA SANJUÁN, L.; CINTAS-PEÑA, M.; BARTELHEIM, M. & LUCIÁÑEZ TRIVIÑO, M. (2018) – Defining the “elites”: a comparative analysis of social ranking in Copper Age Iberia. In MELLER H., GRONENBORN, D. & RISCH, R. (eds.), *Überschuss ohne Staat. Politische Formen in der Vorgeschichte. Surplus without State. Political*

- Forms in Prehistory*. 10. Mitteldeutscher Archäologentag (Halle, Saale, 2017). Halle: Tagungen des Museum für Vorgeschichte Halle, 18, p. 311-333.
- HAIN, F.H. (1982) – *Kupferzeitliche Tierknochenfunde aus Valencina de la Concepción (Sevilla)*. München: Studien über frühe Tierknochenfunde von der Iberischen Halbinsel, 8, p. 1-178.
- HUNT, M. A. & HURTADO, V. (2010) – Pigmentos de sulfuro de mercurio (cinabrio) en contextos funerarios de época calcolítica en el Sur de la península Ibérica. Investigaciones sobre el uso, depósitos minerales explotados y redes de distribución a través de la caracterización composicional e isotópica. In Sainz Carrasco, M. E., López Romero, R., Cano Díaz, M. A. & Calvo García, J. C. (eds.), *Actas del VIII Congreso Ibérico de Arqueometría* (Teruel, 2009). Teruel, p. 123-132.
- INÁCIO, N.; NOCETE, F.; NIETO, J.M.; LÓPEZ ALDANA, P.; PAJUELO, A.; BAYONA, M. R. & ABRIL, D. (2012) – Cerámica común y campaniforme en Valencina de la Concepción (Sevilla): indagando su procedencia a través del análisis arqueométrico. *Estudos Arqueológicos de Oeiras*, 19, p. 95-104.
- JIMÉNEZ JAÍMEZ, V.; GARCÍA GARCÍA, M.; LÓPEZ LÓPEZ, A. & WHEATLEY, D. (2025) – Ditched and Walled Enclosures in Prehistoric Iberia (4th-3rd Millennium BC): Like Oil and Water. *Lucentum*, 44, p. 27-54.
- KIBAROĞGLU, M.; SCHUHMACHER, T.X.; MEDEROS, A.; FALKENSTEIN, F. & BASHORE, C. (2022) – Petrographische Untersuchungen an späthalkolithischer Keramik aus Valencina de la Concepción (Sevilla, Spanien). Vorläufige Ergebnisse und ihre archäologische Interpretation. *Madrider Mitteilungen*, 63, p. 12-41.
- KIBAROĞLU, M.; SCHUHMACHER, T.X.; MEDEROS, A.; FALKENSTEIN, F.; VARGAS, J.M.; MERTZ-KRAUS, R. & HACIOSMANOGLU, S. (2024) – Investigating the Late Chalcolithic pottery production and consumption at Valencina de la Concepcion (Seville, SW-Spain): An archaeometric analysis using petrographic and LA-ICP-MS techniques. *Journal of Archaeological Science, Reports*, 53, 104299, p. 1-19.
- LECHUGA, M. A., SOTO, M. & RODRÍGUEZ-ARIZA, M^a. O. (2014) – El poblado calcolítico Venta del Rapa (finales III milenio Cal. BC), Mancha Real, Jaén. Un recinto de fosos entre las estribaciones de Sierra Mágina y el Alto Guadalquivir. *Trabajos de Prehistoria* 71 (2), p. 353-367. <http://dx.doi.org/10.3989/tp.2014.12139>.
- LIZCANO PRESTEL, R. (1999) – *El polideportivo de Martos (Jaén): Un yacimiento neolítico del IV milenio A.C.* Córdoba.
- LÓPEZ ALDANA, P. & PAJUELO PANDO, A. (2001) – Estrategias político-territoriales de un poder central: el bajo Guadalquivir en el III milenio ANE. *Revista Atlántica-Mediterránea de Prehistoria y Arqueología Social*, 4, p. 207-227.
- LÓPEZ ALDANA, P.; BASHORE, C.; MUÑOZ MORO, P.; MEDEROS, A.; PAJUELO, A.; SCHUHMACHER, T.X.; PEÑA, V. & DOMÍNGUEZ, D. (e.p. 2025) – La ocupación calcolítica en la calle Juan Ramón Jiménez (Valencina de la Concepción, Sevilla). Arqueometalurgia y análisis de huellas de uso”. In MEDEROS, A., BLÁNQUEZ, J. (eds.), *Huellas de un tiempo pasado. Homenaje a la Profesora Carmen Gutiérrez Sáez*. Madrid: *Anejos a Cuadernos de Prehistoria y Arqueología de la Universidad Autónoma de Madrid*, 8, p. 111-127.
- LÓPEZ-GIJÓN, R.; DURAS, S.; SÁNCHEZ SUSÍ, R.; GONZÁLEZ RECIO, M. I., RUBIO SALVADOR, A.; BOTELLA LÓPEZ, M. C. & CÁMARA SERRANO, J. A. (2024) – Primer hallazgo de *Ascaris lumbricoides* en un individuo del Calcolítico Inicial en la península ibérica. *Saguntum*, 56, p. 113-134.
- LUCIÁÑEZ, M. y GARCÍA SANJUÁN, L. (2016) – Los marfiles del *tholos* de Montelirio. In FERNÁNDEZ FLORES, A.; GARCÍA SANJUÁN, L., DÍAZ-ZORITA, M. (eds.), *Montelirio. Un gran monumento megalítico de la Edad del Cobre*. Sevilla: Arqueología Monografías. Junta de Andalucía, p. 245-271.
- LUCIÁÑEZ TRIVIÑO, M.; GARCÍA SANJUÁN, L. & SCHUHMACHER, TH. X. (2013) – Restaurierung von archäologischem Elfenbein am Beispiel von vier chalkolithischen Elfenbeinobjekten aus der Siedlung von Valencina de la Concepción (Sevilla). *Restaurierung und Archäologie*, 6, p. 71-87.

- LUCIAÑEZ TRIVIÑO, M.; GARCÍA SANJUÁN, L. & SCHUHMACHER, TH. X. (2021) – Crafting Ideosyncrasies. Early Social Complexity, Ivory and Identity-Making in Copper Age Iberia. *Cambridge Archaeological Journal*, 32 (1), p. 23-60.
- MÁRQUEZ ROMERO, J. E. & JIMÉNEZ JAÍMEZ, V. (2010) – *Recintos de fosos: genealogía y significado de una tradición en la Prehistoria del suroeste de la Península Ibérica (IV-III milenios a.C.)*. Málaga: Universidad de Málaga.
- MÁRQUEZ ROMERO, J. E.; MATA VIVAR, E. & SUAREZ PADILLA, J. (2022) – *Complexo arqueológico dos Perdigões. Reguengos de Monsaraz, (Portugal): El sector L1. Actuaciones arqueológicas de la Universidad de Málaga (2008-2016)*. Málaga: Universidad de Málaga.
- MARTÍNEZ SÁNCHEZ, R.; CONLIN HAYES, E.; PÉREZ JORDÁ, G.; MORGADO, A. & RODRÍGUEZ, A. (2024) – Before the Plates. Aproximación al Neolítico Reciente en el Alto Guadalquivir a través de los sitios de Grañena Baja II y Arroyo Regordillo (Jaén, Andalucía). *Complutum*, 35 (2), p. 255-284. <https://dx.doi.org/10.5209/compl.98808>
- MARTÍNEZ-SEVILLA, F.; GARCÍA SANJUÁN, L.; LOZANO RODRÍGUEZ, J. A.; MATRTEÍNEZ JORDÁN, J. M.; SCARRE, CH.; VARGAS JIMÉNEZ, J. M.; PAJUELO PANDO, A. & LÓPEZ ALDANA, P. (2020) – A New Perspective on Copper Age Technology, Economy and Settlement: Grinding Tools at the Valencina Mega-Site. *Journal of World Prehistory*. 33, p. 513-559. <http://dx.doi.org/10.1007/s10963-020-09150-4>
- MEDEROS, A.; VARGAS, J. M.; SCHUHMACHER, TH. X.; FALKENSTEIN, F. & LINK, TH. (2016) – Prospecciones arqueológicas y geo-magnéticas en los cerros de La Cabeza y del Mármol, sector Norte del poblado calcolítico de Valencina (Sevilla). Campaña de 2014. *Spal*, 25, p. 11–42.
- MEDEROS, A.; SCHUHMACHER, T.X.; FALKENSTEIN, F.; BARTELHEIM, M.; GUTIÉRREZ, C.; KIBAROĞLU, M.; RISCH, R.; RODRÍGUEZ ARIZA, M.O.; AFONSO VARGAS, J.; BASHORE, C.; EGUÍLUZ, M.; GARVÍN, L.; MONTES, E.; PAJUELO, A.; PÉREZ DÍAZ, S.; VARGAS, J.M.; ORTEGA, M. y RODRÍGUEZ CORDONES, M. (e.p.) – Estudio de los materiales de excavaciones sistemáticas y de urgencia en Valencina de la Concepción. Cerro de la Cabeza, Pabellón Cubierto, Nueva Biblioteca y Calle Trajano. Campaña de 2019. *Anuario Arqueológico de Andalucía 2019. Actuaciones Sistemáticas*. Sevilla: Junta de Andalucía.
- MEDEROS, A.; SCHUHMACHER, TH. X.; FALKENSTEIN, F.; OSTERMEIER, N. & VARGAS, J. M. (2020) – Excavación arqueológica y prospección geomagnética en el sector Norte del yacimiento de la Edad del Cobre de Valencina de la Concepción (Sevilla). Campaña de 2017. *Cuadernos de Prehistoria y Arqueología de la Universidad de Granada*. 30, 307-350. <http://dx.doi.org/10.30827/CPAG.v30i0.15867>
- MEDEROS, A.; SCHUHMACHER, T. X.; FALKENSTEIN, F.; OSTERMEIER, N.; BASHORE, C.; VARGAS, J.M. & RUPPERT, M. (2021) – El poblado de la Edad del Cobre de Valencina de la Concepción (Sevilla). Nuevos datos sobre sus recintos y espacios domésticos. Campaña de 2018. *Cuadernos de Prehistoria y Arqueología de la Universidad de Granada*, 31, pp. 285-331. <http://dx.doi.org/10.30827/CPAG.v31i0.23461>.
- MEDEROS, A.; SCHUHMACHER, T. X.; FALKENSTEIN, F.; OSTERMEIER, N.; BASHORE, C.; EL DANA, N.; GARVÍN, L. & VARGAS, J.M. (2023a) – Valencina de la Concepción (Sevilla): Secuencia del poblado calcolítico y de los recintos de fosos. Campaña de 2019. *Cuadernos de Prehistoria y Arqueología de la Universidad de Granada*, 33, p. 239-298. <https://doi.org/10.30827/cpag.v33i0.28338>
- MEDEROS, A.; SCHUHMACHER, T. X.; VARGAS, J. M.; BASHORE, C. y GARVÍN, L. (2023b) – The painted ceramics from the Chalcolithic mega-site of Valencina de la Concepción (Seville, Spain) and their possible relation with Gar Cahal, Northern Morocco. In BRANDHERM D. (ed.), *Contacts between Europe and the Maghreb during the Metal Ages. XIXth UISPP World Congress-General Session 5: Metal Ages* (Meknès, 2021). Oxford: Archaeopress, p. 14-39.
- MEDEROS, A.; SCHUHMACHER, T. X.; FALKENSTEIN, F.; VARGAS JIMÉNEZ, J.M.; OSTERMEIR, N.; BASHORE, C. & EL DANA, N. (en prensa 2025) – Los espacios domésticos con cabañas en el sector norte del poblado

- calcolítico de Valencina de la Concepción (Sevilla). *Actualidad de la investigación arqueológica en España V (2022-2023). Conferencias impartidas en el Museo Arqueológico Nacional*. Madrid: Ministerio de Cultura y Deportes.
- MEDEROS, A.; CASTILLA, A.; FERNÁNDEZ-PALACIOS, E.; GUILLAMÓN, S.; MALLOL, C.; MARTÍNEZ SÁNCHEZ, R.; PASTOR, M.^a; SCHUHMACHER, T. X. & FALKENSTEIN, F. (e.p.) – Estudio de Materiales arqueológicos de las excavaciones en el Cerro de la Campaña y la Nueva Biblioteca de Valencina de la de la Concepción (Sevilla). año 2022. *Anuario Arqueológico de Andalucía 2022. Actuaciones Sistemáticas*. Sevilla: Junta de Andalucía.
- MEJÍAS GARCÍA, J. C.; CRUZ-AUÑÓN BRIONES, M. R.; PAJUELO PANDO, A. & LÓPEZ ALDANA, P. M. (2015) – Análisis del modelo de organización espacial de la necrópolis de Valencina. La complejidad social a debate. In BRANCO, G., ROCHA, L., DUARTE, C., OLIVEIRA, J. de & BUENO, P. (eds.), *Arqueologia de Transição: O Mundo Funerário*. Actas do II Congresso Internacional Sobre Arqueologia de Transição (Évora, 2013). Évora: Centro de História de Arte e Investigação Artística, p. 52-70.
- MOLINA, F.; MEDEROS, A.; DELGADO HUERTAS, A.; CÁMARA, J.A.; PEÑA, V.; MARTÍNEZ, R.; ESQUIVEL SÁNCHEZ, F.J.; GRANADOS, A.; JIMÉNEZ BROBEIL, S. & ESQUIVEL GUERRERO, J.A. (2020) – La necrópolis calcolítica de Los Millares: Dataciones radiocarbónicas y valoración de la dieta y del medio ambiente a partir del análisis de isótopos estables. *Trabajos de Prehistoria*, 77 (1), p. 67-86.
- MEJÍAS GARCÍA, J. C. (2017) – *Formaciones sociales del III Milenio A.N.E. en Valencina. Sevilla*. Tesis Doctoral. Sevilla: Universidad Sevilla.
- MORGADO, A.; LOZANO, J., GARCÍA SANJUÁN, L.; LUCIÁÑEZ, M.; ODRIOZOLA, C.; LAMARCA-IRISARRI, D., & FLORES, Á. (2015) – The allure of rock crystal in Copper Age southern Iberia: Technical skill and distinguished objects from Valencina de la Concepción (Seville, Spain). *Quaternary International*, 424. <https://doi.org/10.1016/j.quaint.2015.08.004>
- MURILLO BARROSO, M. (2016a) – El ámbar del tholos de Montelirio. In FERNÁNDEZ FLORES, A.; GARCÍA SANJUÁN, L. y DÍAZ-ZORITA, M. (eds.), *Montelirio. Un gran monumento megalítico de la Edad del Cobre*. Sevilla: Arqueología Monografías. Junta de Andalucía, p. 311-344.
- MURILLO BARROSO, M. (2016b) – El oro del tholos de Montelirio en el contexto de la tecnología áurea de Valencina. In FERNÁNDEZ FLORES, A.; GARCÍA SANJUÁN, L. y DÍAZ-ZORITA, M. (eds.), *Montelirio. Un gran monumento megalítico de la Edad del Cobre*. Sevilla: Arqueología Monografías. Junta de Andalucía, p. 285-310.
- NOCETE CALVO, F. (1989) – *El Espacio de la Coerción. La Transición al Estado en las Campiñas del Alto Guadalquivir (España), 3000-1500 a.C.* Oxford: British Archaeological Reports. International Series, 492.
- NOCETE, F.; QUEIPO, G.; SÁEZ, R.; NIETO, J. M.; INÁCIO, N.; BAYONA, M. R.; PERAMO, A.; VARGAS, J. M.; CRUZ-AUÑÓN, R.; GIL-IBARGUCHI, J. I. & SANTOS, J. F. (2008) – The smelting quarter of Valencina de la Concepción (Seville, Spain): the specialised copper industry in a political centre of the Guadalquivir Valley during the Third millennium BC (2750-2500 BC). *Journal of Archaeological Science*, 35, p. 717-732. <https://doi.org/10.1016/j.jas.2007.05.019>
- ODRIOZOLA, C.P. & GARCÍA SANJUÁN, L. (2013) – Las cuentas de collar de piedra verde de Matarrubilla (Valencina de la Concepción (Sevilla)). In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 485-493.
- ORTEGA GORDILLO, M. (2013) – El registro estratigráfico en el Pabellón Cubierto de Valencina de la Concepción (Sevilla). In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 113-130.

- ORTEGA GORDILLO, M. & MEDEROS MARTIN, A. (e.p. 2025) – Espacios de actividad y estructuras domésticas del Calcolítico Medio en la calle Clara Campoamor-avenida Andalucía (Valencina de la Concepción, Sevilla). Una primera aproximación. In MEDEROS, A., BLÁNQUEZ, J. (eds.), *Huellas de un tiempo pasado. Homenaje a la Profesora Carmen Gutiérrez Sáez*. Madrid: *Anejos a Cuadernos de Prehistoria y Arqueología de la Universidad Autónoma de Madrid*, 8, p. 81-97.
- PAJUELO PANDO, A. & LÓPEZ ALDANA, P. (2013) – Estudio arqueozoológico de estructuras significativas de c/ Mariana Pineda s/n (Valencina de la Concepción, Sevilla). In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 445-458.
- PASTOR QUILES, M.; DORADO ALEJOS, A.; VARGAS JIMÉNEZ, J.M.; SCHUHMACHER, TH. X.; MEDEROS MARTÍN, A.; FALKENSTEIN, F.; BASHORE ACERO, CH. & EL DANA, N. (2024) – La construcción con adobe en la península ibérica en el Calcolítico: las evidencias de Valencina de la Concepción (Sevilla). *Trabajos de Prehistoria*, 86 (2), p. 1-23. <https://doi.org/10.3989/tp.2024.961>
- RAMOS MUÑOZ, J. (1991-92) – La industria lítica del Cobre Pleno del Poblado de Valencina de la Concepción (Sevilla). *Norba*, 11-12, p. 43-74.
- ROVIRA LLORENS, S. (2016) – La metalurgia calcolítica en el suroeste de la Península Ibérica: una interpretación personal. *Menga*, 7, p. 53-67.
- RISCH, R. (2018) – Affluent Societies of Later Prehistory. In MELLER H., GRONENBORN, D. & RISCH, R. (eds.), *Überschuss ohne Staat. Politische Formen in der Vorgeschichte. Surplus without State. Political Forms in Prehistory*. 10. Mitteldeutscher Archäologentag (Halle, Saale, 2017). Halle: Tagungen des Museum für Vorgeschichte Halle, 18, p. 45-65.
- ROGERIO CANDELERA, M. A.; HERRERA, L. K.; MILLER, A. Z.; GARCÍA SANJUÁN, L.; MORA MOLINA, C.; WHEATLEY, D. W.; JUSTO & SAIZ JIMÉNEZ, C. (2013) – Allochthonous Red Pigments Used in Burial Practices at the Copper Age Site of Valencina de la Concepción (Sevilla, Spain). Characterisation and Social Dimension. *Journal of Archaeological Science*, 40 (1), p. 279-290. <http://dx.doi.org/10.1016/j.jas.2012.08.004>
- RUIZ MATA, D. & MEDEROS MARTÍN, A. (2020) – La primera campaña de excavación en el poblado calcolítico de Valencina de la Concepción (Sevilla). El corte estratigráfico 1, 1971. Fases del Calcolítico Inicial y Campaniforme. In BERROCAL, L. & MEDEROS, A. (eds.), *Docendo Discimus. Homenaje a la profesora Carmen Fernández Ochoa*. Madrid: *Anejos a Cuadernos de Prehistoria y Arqueología de la Universidad Autónoma de Madrid*, 4, 55-70. <http://dx.doi.org/10.15366/ane4.ochoa2020.002>
- RUIZ MORENO, T. (2013) – La Pastora (Valencina de la Concepción, Sevilla): Una historia desconocida. In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 201-217.
- SARDÁ PIÑERO, D. (2013) – Estructuras negativas multifuncionales en Avenida de Andalucía N° 9, Valencina de la Concepción (Sevilla). In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 151-156
- SCHIRRMACHER, J.; KNEISEL, J.; KNITTER, D.; HAMER, W.; HINY, M.; SCHNEIDER, R. R. & WEINELT, M. (2020) – Spatial patterns of temperature, precipitation, and settlement dynamics on the Iberian Peninsula during the Chalcolithic and the Bronze Age, *Quaternary Science Reviews*, 233, 106220. <https://doi.org/10.1016/j.quas-cirev.2020.106220>

- SCHULZ, H. D. (1995) – Holozäne Küstenlinie am Unterlauf des Río Guadalquivir zwischen Sevilla und der Mündung in den Atlantik. *Madrider Mitteilungen*, 36, p. 219-232.
- SCHUHMACHER, Th. X. (2017) – Ivory Exchange Networks in the Chalcolithic of the Western Mediterranean. In BARTELHEIM, M., BUENO, P. & KUNST, M. (eds.), *Key Resources and Socio-Cultural Developments in the Iberian Chalcolithic*. Tübingen: RessourcenKulturen 6, p. 291–312.
- SCHUHMACHER, Th. X. (2022) – Ivory in the Early Bronze Age of Southeastern Iberian Peninsula. In *Landscapes as Resource Assemblages in the Bronze Age of Southern Spain*, (Linares, Jaén, 2019). Tübingen: RessourcenKulturen, 17, p. 301–324.
- SCHUHMACHER, TH. X.; FALKENSTEIN, F.; LINK, TH.; MEDEROS, A. & VARGAS, J. M. (2015) – Archäologische und geophysikalische Prospektionen im Nordbereich der chalkolithischen Siedlung von Valencina de la Concepción bei Sevilla (Andalusien) im Jahr 2014. *Madrider Mitteilungen*. 56, p. 1-39.
- SCHUHMACHER, TH. X.; FALKENSTEIN, F.; MEDEROS, A.; OSTERMEIER, N.; RUPPERT, M. & BASHORE, C. (2019a) – Ausgrabungen und Prospektionen im Nordbereich der chalkolithischen Siedlung von Valencina de la Concepción bei Sevilla (Andalusien). Die Kampagnen der Jahre 2017 und 2018. *Madrider Mitteilungen*. 60, p. 55–101.
- SCHUHMACHER, TH. X.; MEDEROS, A.; FALKENSTEIN, F.; RUPPERT, M. & BASHORE, C. (2019b) – Hut structures in the Chalcolithic ditched enclosure of Valencina de la Concepción, Sevilla (southern Spain). In MELLER, H., FRIEDERICH, S., KÜSSNER, M., STÄUBLE, H. & RISCH, R. (eds.), *Siedlungsarchäologie des Neolithikums und der Frühen Bronzezeit – Late Neolithic and Early Bronze Age Settlement Archaeology*, 11. Mitteldeutscher Archäologentag vom 18. bis 20. Oktober 2018 in Halle (Saale). Halle: (Tagungen des Landesmuesum für Vorgeschichte Halle 20/2, p. 989–1002
- SCHUHMACHER, T.X.; MEDEROS, A.; FALKENSTEIN, F.; OSTERMEIER, N.; BASHORE, C.; EL DANA, N. & GARVÍN, L. (2021) – Ausgrabungen und Prospektionen im Nordbereich der Chalkolithischen Siedlung von Valencina de la Concepción bei Sevilla (Andalusien). Die Kampagnen des Jahres 2019. *Madrider Mitteilungen*, 62, p. 100-147.
- SCHUHMACHER, T. X.; MEDEROS, A.; FALKENSTEIN, F.; OSTERMEIER, N.; BASHORE, C. & EL DANA, N. (2024a) – The Chalcolithic mega-site of Valencina de la Concepción (Seville, Spain). New investigations in the Northern sector. In DINIZ, M., MARTINS, A., NEVES C. & ARNAUD J. (eds.), *Vila Nova de São Pedro-1971/2021: cinquenta anos de investigação sobre o Calcolítico, no Ocidente peninsular* (Lisboa, 2021). Lisboa: Universidade de Lisboa, p. 337-365.
- SCHUHMACHER, T. X.; FALKENSTEIN, F.; MEDEROS, A.; EL DANA, N.; OSTERMEIER, N. & BASHORE, C. (2024b) – Ausgrabungen und Prospektionen im Nordbereich der chalkolithischen Siedlung von Valencina de la Concepción bei Sevilla (Andalusien). Die Kampagnen des Jahre 2020 und 2022. *Madrider Mitteilungen*, 65, p. 2-83.
- STANISH, CH.; EARLE, T.; GARCÍA SANJUÁN; L.; TANTALEÁN, H.; BARRIENTOS, G. (2024) – Early Monumentality, Ritual, and Political Complexity. Formative Peru and Copper Age Iberia. *Current Anthropology* 65,5, p. 810-836.
- VALERA, A. C. (2012) – Fossos sinuosos na Pré-História Recente do Sul de Portugal: ensaio de análise crítica. *Actas do V Encontro de Arqueologia do Sudoeste Peninsular*. Almodóvar: Município de Almodôvar, p. 25-38.
- VALERA, A. C. (2013) – Recintos de fossos da Pré-História Recente em Portugal. *Al-madan*, 18, P. 93-110.
- VALERA, A. C. (2015) – Social Change in the Late 3rd Millennium BC in Portugal. The twilight of Enclosures. In MELLER, H., ARZ, H. W., JUNG, R. & RISCH, R. (eds.), *2200 BC – Ein Klimasturz als Ursache für den Zerfall der Alten Welt? – 2200 BC – A Climatic Breakdown as a Cause for the Collaps of the Old World?*, 7. Mitteldeutscher

- Archäologentag (Halle, Saale, 2014). Halle: Tagungen des Landesmuseums für Vorgeschichte Halle, 12/I, p. 409-426.
- Valera, A. C. (2020) – Ephemeral and cosmological monumentality: the strange ditched enclosures of Chalcolithic South Portugal. In GEBAUER, A.B., SORENSEN, L., TEATHER, A. & VALERA, A. C. (eds.), *Monumentalising life in the Neolithic. Narratives of change and continuity*. Oxbow. Oxford, p. 239-250.
- VALERA, A. C. (2021) – ‘Death in the Occident Express’: Social Breakdown in Southwestern Iberia at the End of the 3rd Millennium BC. In SOARES LOPES, S. & ALEXANDRE GOMES, S. (eds.), *Between the 3rd and 2nd Millennia BC: Exploring Cultural Diversity and Change in Late Prehistoric Communities*. Oxford: Archaeopress, p. 105-118.
- VALERA, A. C. (2023) – Monumentality in wood: a preliminary approach to timber circles of Late Prehistory in South Portugal, *Cuadernos de Prehistória y Arqueología de la Universidad Autónoma de Madrid*, 49 (1), p. 11-31.
- VALERA, A. C. (2024) – Ditched and Walled Enclosures of Late Prehistory in South Portugal: A Brief Comparative Approach. In DINIZ, M., MARTINS, A., NEVES C. & ARNAUD, J. (eds.), *Vila Nova de São Pedro-1971/2021: cinquenta anos de investigação sobre o Calcolítico, no Ocidente peninsular* (Lisboa, 2021). Lisboa: Universidade de Lisboa, p. 291-305.
- VALERA, A. C.; SILVA, A. M.^a & MÁRQUEZ, J. E. (2014) – The temporality of Perdigões: absolute chronology of the structures and social practices. *Spal*, 23, p. 11-26 <http://dx.doi.org/10.12795/spal.2014i23.01>
- VALERA, A. C.; PEREIRO, T. O.; VALÉRIO, P. & MONGE SOARES, A. M. (2020) – O recinto da folha do ouro 1 (serpa) no contexto dos recintos de fossos calcolíticos alentejanos. In ARNAUD, J.M., NEVES, C. & MARTINS, A. (eds.), *Arqueologia em Portugal. 2020 – Estado de Questão*. Lisboa: Associação dos Arqueólogos Portugueses e CITCEM, p. 971-984.
- VALLS PÉREZ, M. (2012) – Excavación arqueológica extensiva C/ Maestro Gabriel nº 8, Valencina de la Concepción (Sevilla). *Anuario Arqueológico de Andalucía 2012. Sevilla*.
- VARGAS JIMÉNEZ, J. M. (2004) – *Carta Arqueológica Municipal de Valencina de la Concepción*. Sevilla: Consejería de Cultura, Junta de Andalucía.
- VARGAS JIMÉNEZ, M. (2013) – Indicadores arqueológicos para la planificación y gestión del yacimiento de Valencina de la Concepción (Sevilla). In GARCÍA SANJUÁN, L., VARGAS JIMÉNEZ, J. M., HURTADO PÉREZ, V., RUIZ MORENO, T. & CRUZ-AUÑÓN, R. (eds.), *El Asentamiento Prehistórico de Valencina de la Concepción (Sevilla): Investigación y Tutela en el 150 Aniversario del Descubrimiento de La Pastora*. Sevilla: Universidad de Sevilla, p. 535-557.
- VARGAS JIMÉNEZ, J. M.; MEYER, C. & ORTEGA GORDILLO, M. (2012) – El tholos de La Pastora y su entorno: una imagen del sector oriental del yacimiento de Valencina a través de la geofísica. *Menga*, 3, p. 121-138
- VARGAS JIMÉNEZ, J. M.; CÁCERES PURO, L. M. & ODRIOZOLA, C. P. (2019) – El tholos de La Pastora, una nueva perspectiva a partir del análisis arqueológico de su construcción. *Spal*, 28 (2), p. 113-141.
- VARGAS JIMÉNEZ, J.M.; MEDEROS, A.; SCHUHMACHER, T.X.; BASHORE, C. & LÓPEZ TORRES, P. (2025) – Excavaciones arqueológicas en la parcela de la Nueva Biblioteca. Una gran construcción muraria del asentamiento calcolítico de Valencina de la Concepción (Sevilla). *Madridier Mitteilungen*, 66.
- VARGAS JIMÉNEZ, J. M.; SCHUHMACHER, TH. X.; MEDEROS MARTÍN, A.; BASHORE ACERO, CH. & DOMÍNGUEZ FERNÁNDEZ, D. (2021) – *Memoria preliminar. Actividad Arqueológica Preventiva. Excavación arqueológica y control de movimientos de tierra para la Nueva Biblioteca Pública Municipal en la C/ Trabajadores esquina a C/Alegría 2a fase*, Informe sin publicar.
- ZAFRA, N.; HORNOS, F. y CASTRO LÓPEZ, M. (1999) – Una macro-aldea en el origen del modo de vida campesino: Marroquíes Bajos (Jaén), c. 2500-2000 cal ANE. *Trabajos de Prehistoria*, 56 (1), p. 77-102.