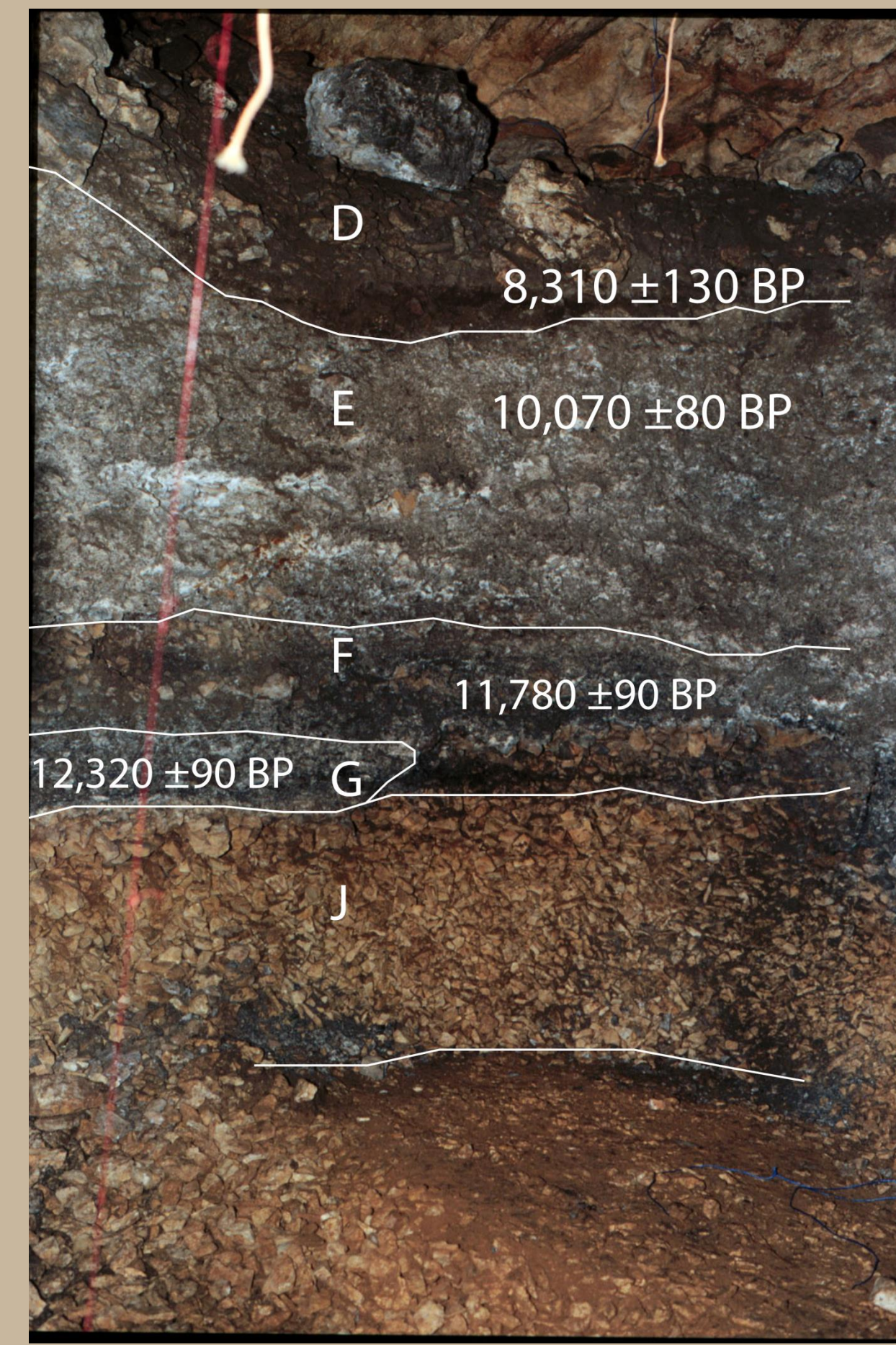


INTRODUCTION

Lithic assemblages are considered to be strong proxies from which inferences about site function can be drawn. Lapa do Picareiro, a cave site in the Estremadura region of Portugal, possesses continuous depositional chronology throughout the Pleistocene epoch. Its excavation, beginning in 1994, is currently under the direction of Dr. Jonathan Haws, and continues to produce high resolution data sets pertaining to site function, lithic technological organization, and subsistence practices. This study, which is part of a broader Master's thesis project, intends to provide a preliminary analysis of the lithic assemblage from the Late Magdalenian layer of F/G (12,300 and 11,800 BP) from Lapa do Picareiro in central Portugal.



View from the mouth of Lapa do Picareiro (above).



Vertical profile of layers D-J (above).

OBJECTIVE

- ❖ Gather comprehensive, high resolution lithic technological and typological data sets
- ❖ Establish models of site function and land-use through an in-depth analysis of the recovered lithic assemblage from the late Magdalenian layer of F/G at Lapa do Picareiro.
- ❖ Contextualize Lapa do Picareiro with other contemporaneous sites in the region.

METHODS

- ❖ Inventory the lithic assemblage from layer F/G.
- ❖ Identify raw material types and their respective representations in the assemblage.
- ❖ Distinguish various artifact typological classes present in the assemblage.
- ❖ Compare preliminary analysis of the assemblage with previously done analysis.

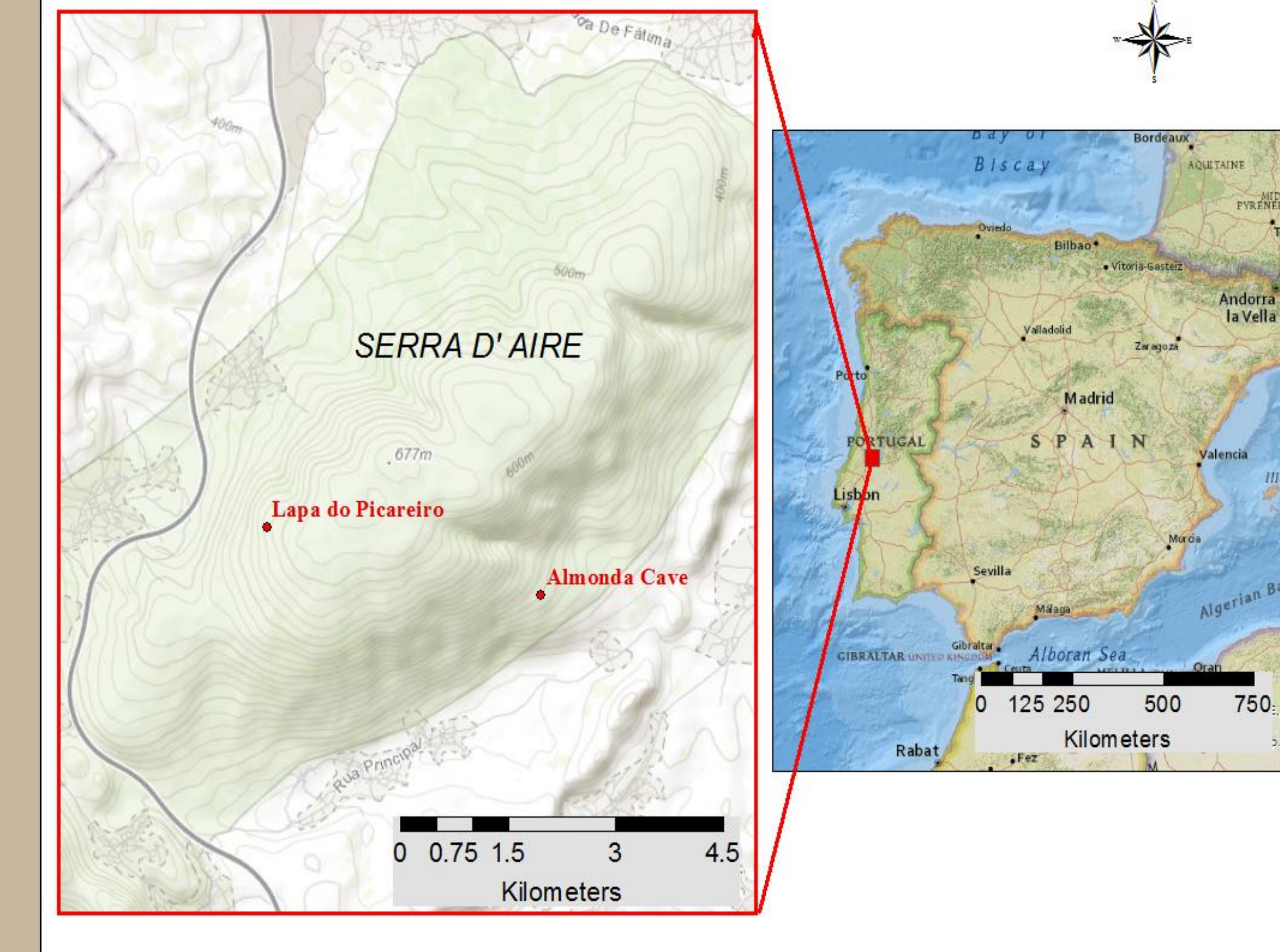
STUDY AREA

Lapa do Picareiro is a cave site located in the limestone mountain range of Serra d'Aire, c. 100km North-East of Lisbon in the Estremadura region of Portugal. Opening on the western face of the mountain range at roughly 570 meters above sea level, the cave prominently overlooks a wide valley. It currently represents the highest elevation Upper Paleolithic site known in central and southern Portugal (Bicho *et al* 2011). The interior of the cave is a large chamber, about 10 x 15 meters, with its lowest point reaching 10.5 meters below datum.



Inside the cave during excavation in 2015 (above).

Lapa do Picareiro, Portugal



Location of Lapa do Picareiro (Image by Forrest Melvin, above).

Lithic Materials from Layer F/G

Lithic Materials From Layer F/G 2006 Analysis					
	Quartz	Quartzite	Flint	Rock Crystal	Grand Total
Fragments	2	6	8		16
Chips	325	144	1041		1510
Flakes	6	28	54	1	89
Flake Fragments	7	55	39		101
Blades and Bladelets			19		19
Fragment of Blades and Bladelets	1	3	48		52
Burin Spalls		1	16		17
Crests and Tablets		2	6		8
Cores	6	5	8		19
Retouched Tools	6	2	108	5	121
Grand Total	353	246	1349	6	1954

Lithic Materials From Layer F/G 2015 Analysis									
	Basalt	Chalcedony	Flint/Chert	Limestone	Quartz	Quartzite	Rock Crystal	Schist	Grand Total
Blade			22			3			25
Bladelet			59		2				61
Burin Spall			55		12	8			75
Chip			1312	1	526	262	2		2103
Core			26		17	25			68
Fire Cracked						9			9
Flake	1		168	1	26	89			285
Flake Fragment		1	110		18	39			168
Fragment			25	6	9	15	1		56
Fragment of Blade or Bladelet			141		7	7			155
Hammerstone						2		1	3
Pebble						5			5
Prep & Maintenance products			65		1	28			94
Retouched Tools			192		22	12			226
Grand Total	1	1	2175	8	640	504	3	1	3333

Retouched Tools Layer F/G

2006 Analysis	
	Count of Artifact Type
Burin	15
Endscrapers	8
Truncations	1
Retouched Flakes	12
Notches and Denticulates	20
Backed Bladelets	33
Microlithic Points	15
Other Retouched Tools	15
Grand Total	119

2015 Analysis	
	Count of Artifact Type
Backed Tool	70
Burin	79
Composite Tool	7
Denticulate	5
Endscraper	1
Notch	21
Perforator	1
Retouched Tool	70
Side Scraper	7
Thick Endscraper	9
Thin Endscraper	16
Truncation	9
Grand Total	295

DISCUSSION

In the current analysis of the lithic assemblage (N= 3,333) from the Late Magdalenian, layer F/G, the main conclusions of the study were:

- ❖ There continue to be three primary raw materials utilized:
 - ❖ Flint (65%), quartz (19%), and quartzite (16%)
- ❖ 63% of the assemblage (N=2,103) is composed of chips measuring 1 cm², not including those representing bladelet fragments.
- ❖ Cores represent a rough 2% of the complete assemblage (N=68).
- ❖ Less chips, cores represent 6% of the assemblage.
- ❖ Core preparatory and maintenance flakes represent 3% (N=94).
- ❖ Complete and semi Cortical flakes represent 2% (N=53) of the assemblage.
- ❖ Less chips, retouched tools represent roughly 24% of the assemblage (N=290).
- ❖ Weaponry tips account for 24% of the retouched tool assemblage.

The data recovered from this preliminary analysis has identified many trends worthy of note. Specifically the high prevalence of retouched tools compared to the relatively low representation of cores.



PRELIMINARY RESULTS

This study is consistent with the previous analysis in that:

- ❖ Flint is still the dominant raw material utilized for stone tool production at Lapa do Picareiro
- ❖ Cores were found to be of low representation within the assemblage
- ❖ The retouched tool class represents roughly a quarter of the total lithic assemblage.

This study deviates slightly from the previous analysis in that:

- ❖ Preparatory and maintenance flakes represent roughly 3% of the assemblage.
- ❖ Cortical and semi cortical flakes represent 2% of the assemblage.
- ❖ More typological classes are represented in the retouched tool assemblage.
- ❖ Retouched flakes are equal to the number of weaponry tips.



CONCLUSIONS

This study resulted in the first time that a comprehensive inventory of the complete Late Magdalenian lithic assemblage from layer F/G at Lapa do Picareiro had been conducted. This analysis allowed for trends in raw material use to be identified as well as the identification of typological classes that were previously unknown in the assemblage.

Previous analysis of the lithic assemblage from layer F/G at Lapa do Picareiro led investigators to infer that the site acted as an animal processing locale during the Late Magdalenian. The current study identified several trends in the lithic assemblage that corroborated these previously held inferences.

The data recovered from this study will ultimately allow for Lapa do Picareiro to be compared to other contemporaneous sites in the region allowing for a more comprehensive understanding of prehistoric land use, mobility strategies, subsistence practices and settlement patterns during the Late Magdalenian in central Portugal.

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