



This is a repository copy of *Animal mobility in Chalcolithic Portugal: Isotopic analyses of cattle from the sites of Zambujal and Leceia*.

White Rose Research Online URL for this paper:  
<http://eprints.whiterose.ac.uk/144121/>

Version: Supplemental Material

---

**Article:**

Wright, E. [orcid.org/0000-0002-0770-3898](https://orcid.org/0000-0002-0770-3898), Waterman, A.J., Peate, D.W. et al. (3 more authors) (2019) Animal mobility in Chalcolithic Portugal: Isotopic analyses of cattle from the sites of Zambujal and Leceia. *Journal of Archaeological Science: Reports*, 24. pp. 804-814. ISSN 2352-409X

<https://doi.org/10.1016/j.jasrep.2019.02.005>

---

Article available under the terms of the CC-BY-NC-ND licence  
(<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

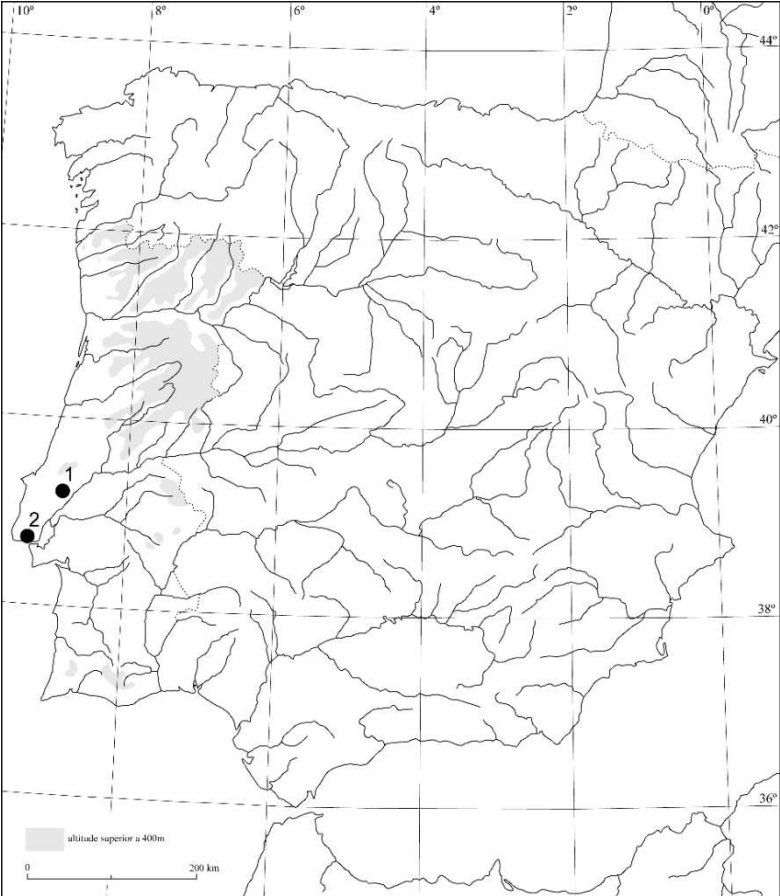


Figure 1: Location of the two sites. 1: Castro do Zambujal; 2. Leceia

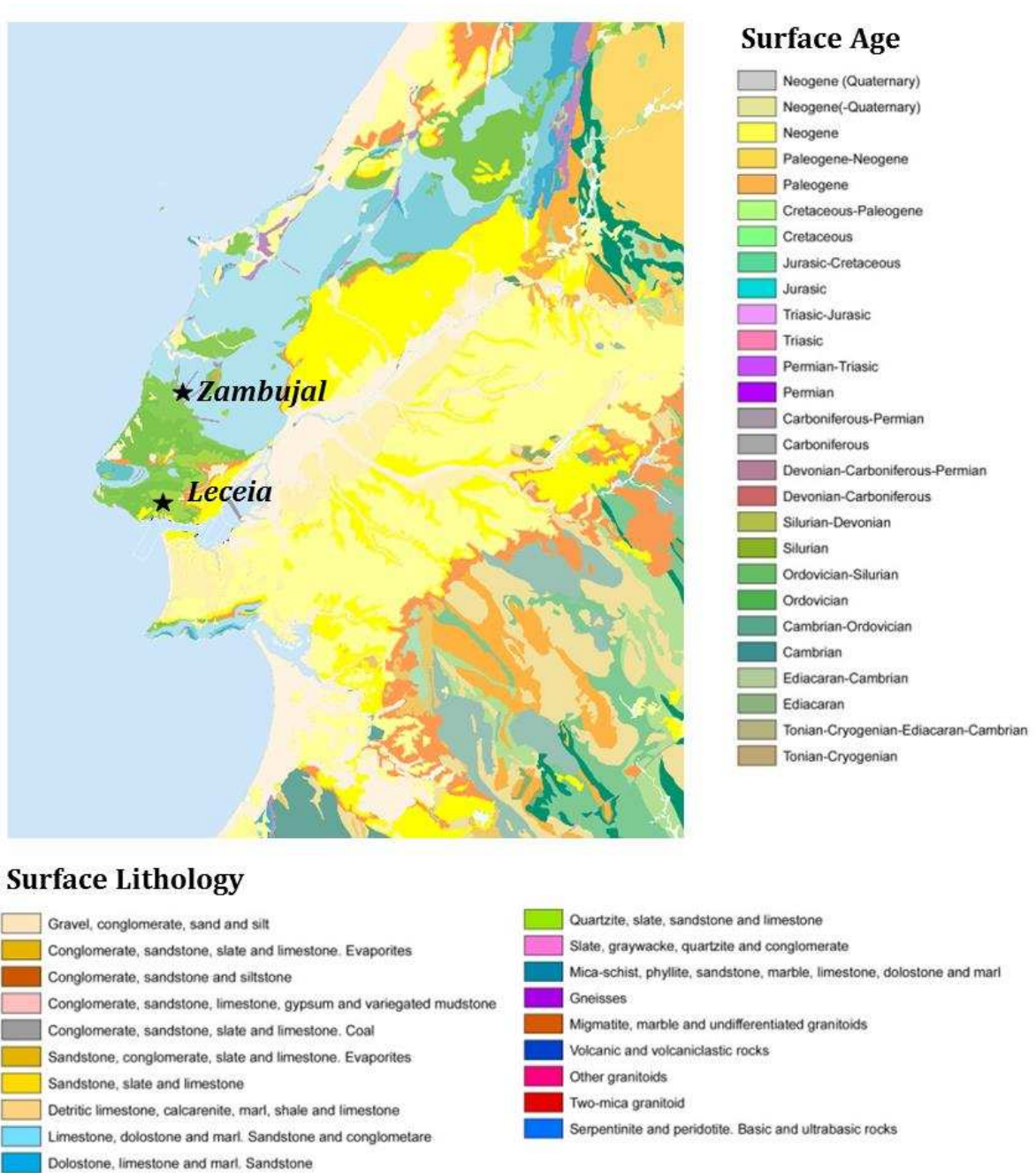


Figure 2: Geological map of the study area

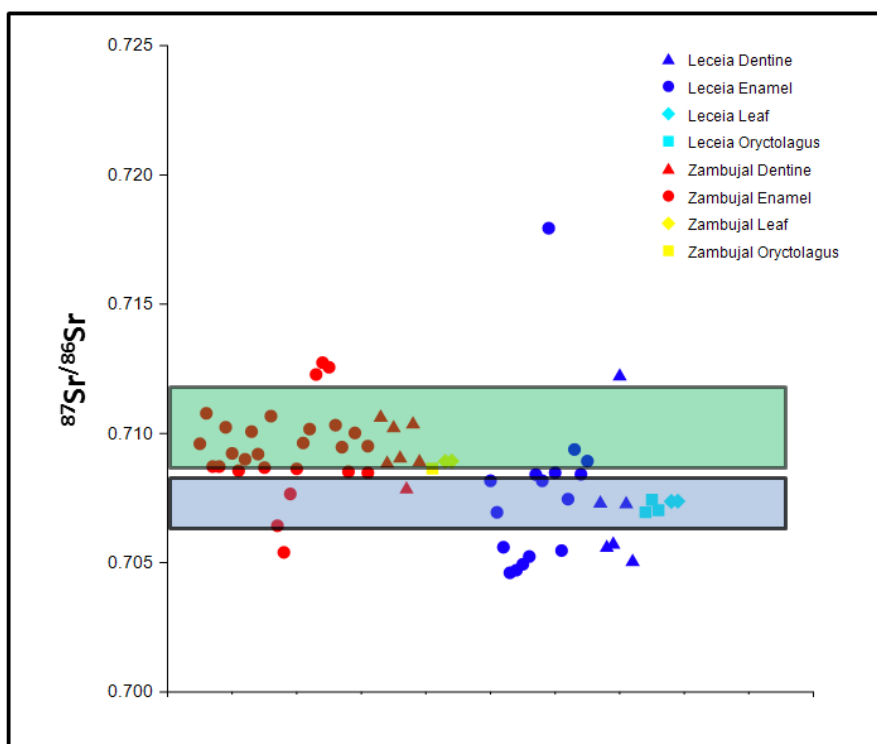


Figure 3: Plot of  $^{87}\text{Sr}/^{86}\text{Sr}$  ratios from cattle teeth (enamel and dentine) at Zambujal and Leceia, alongside ratios taken from locally collected rabbit and plants. The generalised local range for Zambujal is shown in green, and for Leceia in blue.

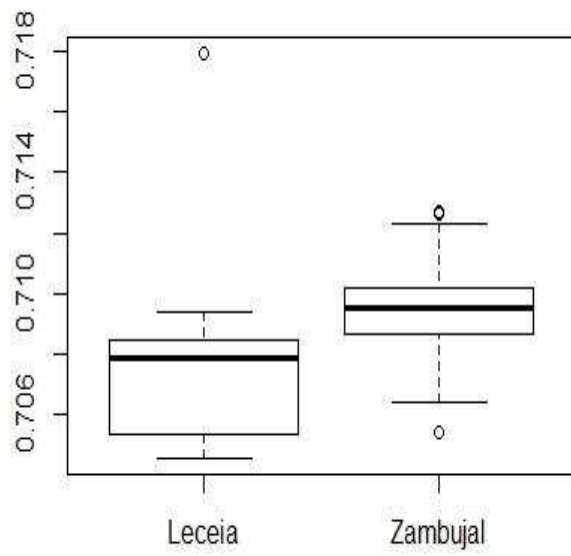


Figure 4: Box-plot comparing  $^{86}\text{Sr}/^{87}\text{Sr}$  enamel values between the two sites

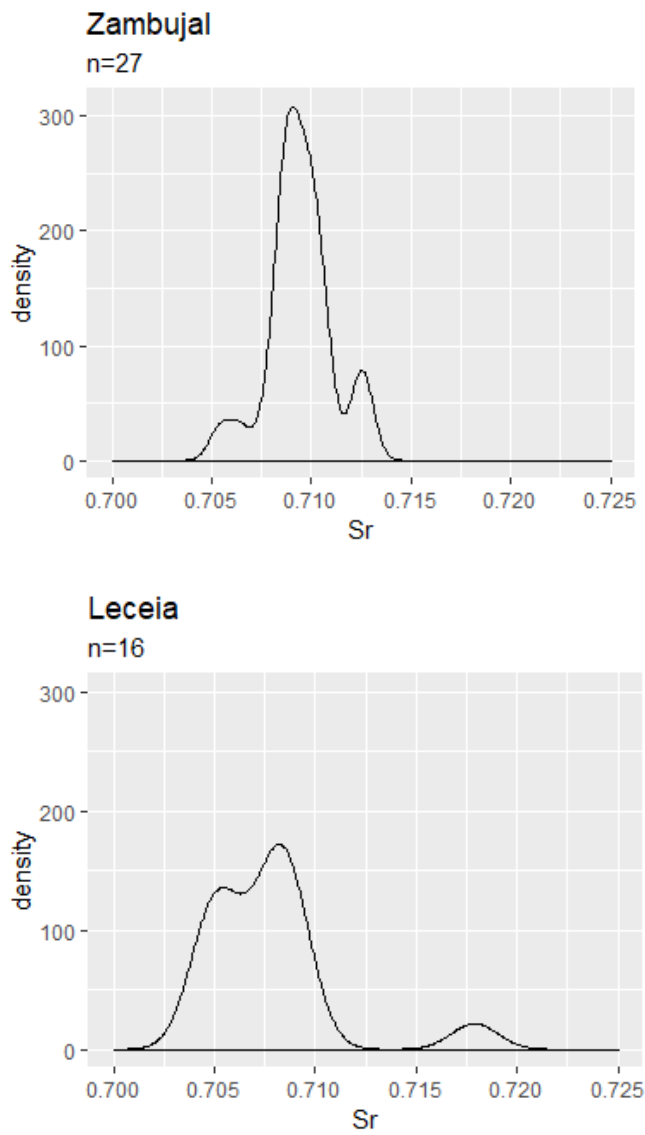


Figure 5: Density plots comparing  $^{87}\text{Sr}/^{86}\text{Sr}$  enamel values between the two sites

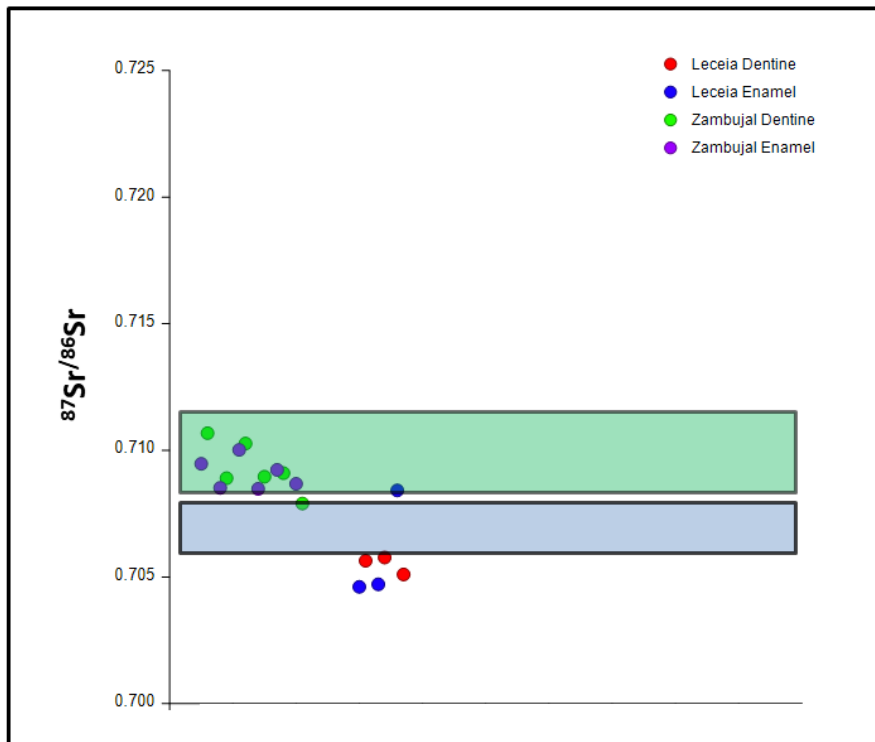


Figure 6: Plot showing  $^{87}\text{Sr}/^{86}\text{Sr}$  values for enamel and dentine pairs.

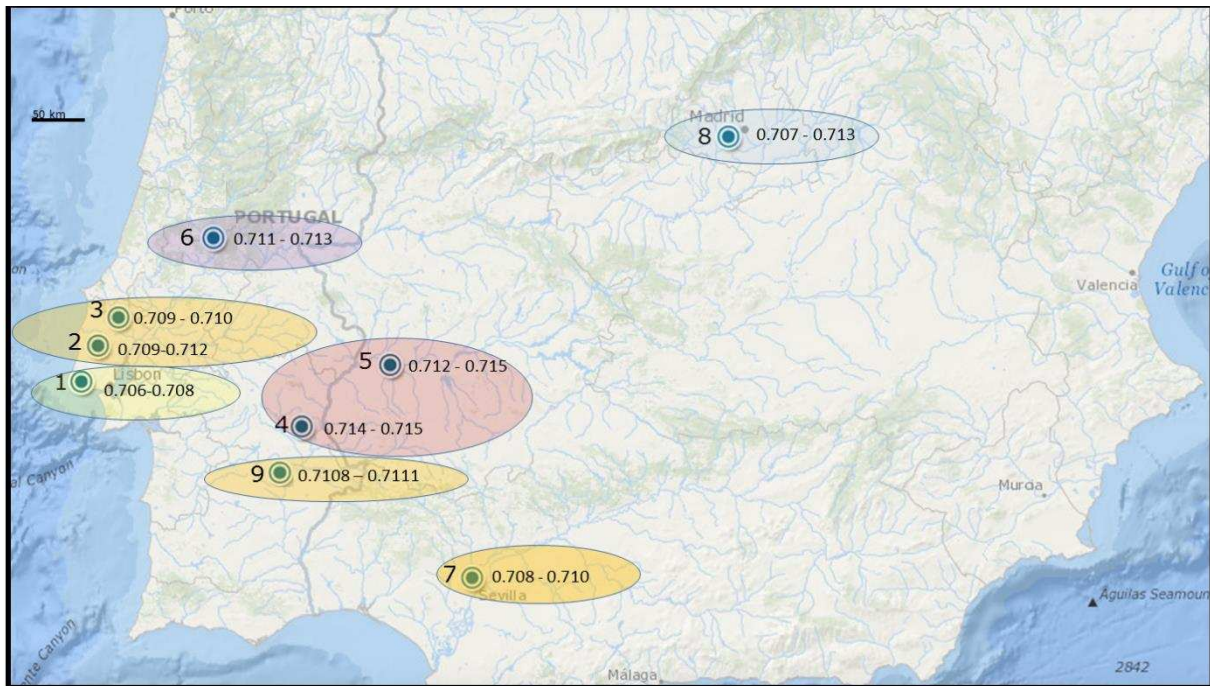


Figure 7: Sites listed in table with  $^{87}\text{Sr}/^{86}\text{Sr}$  ranges. 1. Leceia, 2. Zambujal, 3. Bom Santo, 4. Perdigões, 5. La Pijotilla, 6. Rego da Murta I and II, 7. Valencina - Castilleja, 8. Madrid-region sites, 9. Monte da Cegonha