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10th International Meeting on Taphonomy and Fossilization Comacchio (Ferrara), June 17th-19th, 2025

ABSTRACT BOOK

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EDITED BY DAVIDE BASSI AND ORNELLA DE CURTIS

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Previous International Meetings on Taphonomy and Fossilization TAPHOS

Madrid (1990), Zaragoza (1995), Valencia (2002), Barcelona (2005), Granada (2008), Tübingen (2011), Ferrara (2014), Vienna (2017), Madrid (2022).

EVIDENCE OF ORNAMENTAL SHELL USE IN THE EPIGRAVETTIAN LEVELS OF SAN TEODORO CAVE (ACQUEDOLCI, MESSINA)

Arianna Romano[1], Luca Sìneo[2], Gerlando Vita[3], Antonello Aquilano[4], Carmela Vaccaro[4], Ursula Thun Hohenstein[5]

1. Department of Cultures and Societies, University of Palermo (Italy), Viale delle Scienze ed.15; arianna.romano@unipa.it
2. Department of Biological, Chemical and Pharmaceutical Sciences and Tecnologies (STEBICEF), Laboratory of Anthropology via Archirafi, 18, University of Palermo (Italy), luca.sineo@unipa.it
3. Department of Earth and Marine Sciences (DISTEM), University of Palermo (Italy), Via Archirafi 22, gervita68@hotmail.com
4. Department of Environmental Sciences and Prevention, University of Ferrara (Italy), antonello.aquilano@unife.it
5. Department of Humanities, University of Ferrara (Italia); ursula.thun@unife.it

San Teodoro Cave, located in Acquedolci in the northeastern part of Sicily, is a key archaeological site that offers valuable insights into human activities in the Central Mediterranean during the Upper Palaeolithic. The site features a complex stratigraphic sequence, with Epigravettian layers yielding a rich assemblage of archaeological materials, such as lithic tools, faunal remains, and marine shells.

Notably, the presence of marine shells in these layers provides evidence of the long-distance exploitation of coastal resources by hunter-gatherer groups, suggesting their integration into both subsistence strategies and symbolic practices. Some of the recovered shells display clear signs of human modification, suggesting that they were not just collected for consumption. In several cases, natural perforations appear to have been modified intentionally to facilitate stringing or attachment to other materials (Fig. 1).

Microscopic analysis revealed surface traces on the modified shells, including wear patterns and micro-abrasions, consistent with prolonged handling or use as ornaments. This evidence strongly supports their interpretation as items of personal adornment or decorative use. Notably, red ochre residues were identified on several modified shells. These residues were characterised by Scanning Electron Microscopy (SEM), which confirmed their chemical composition and provided strong evidence of their intentional application.

The integration of microscopic and chemical analyses strengthens the interpretation of these artefacts as elements of symbolic behaviour, shedding light on the cultural complexity of Epigravettian communities. Further, the findings from San Teodoro Cave offer broader implications for our understanding of how coastal resources were integrated into both daily life and symbolic practices in prehistoric Mediterranean societies, while also contributing new data to the ongoing research at the archaeological investigation of the site.

Figure 1. Magnified view of a Columbella rustica shell displaying a human-made perforation.

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