



The gastropod fauna of the Epipalaeolithic shell midden in the Vestibulo chamber of Nerja Cave (Málaga, southern Spain)

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ABSTRACT

The sedimentary record of the Vestíbulo, Mina and Torca chambers in the ancient entrance of Nerja Cave (Málaga, southern Spain) developed between around 30 and 3.6 ka cal BP. The long record of human occupation shows a dominance of terrestrial snails associated with the Gravettian, with a continuation of these types in the Solutrean when marine shells begin to be introduced. During the Magdalenian, marine bivalves are dominant. Marine molluscs reach a maximum during the Epipalaeolithic, giving rise to a shell midden formed primarily by *Mytilus edulis* and diverse species of *Patella*. The Epipalaeolithic shell midden occurs in Unit 4 and can be dated to the Pleistocene–Holocene boundary. This paper focuses on the terrestrial, marine and freshwater gastropods present in the Epipalaeolithic. Among these remains were specimens carried in by humans for both food and ornamental purposes. Others were introduced accidentally by humans, and finally, other specimens entered the cave by natural processes.

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1. Introduction

Nerja Cave is located at the southern end of the Iberian Peninsula in Málaga province (Fig. 1). The external chambers of the cave (Torca, Mina and Vestíbulo) contain an archaeological record dated between 30 and 3.6 ka cal BP. The molluscs recovered during the archaeological excavations directed by Francisco Jordá Cerdá were studied between 1979 and 1986. They came from the Mina chamber (campaigns of 1979, 1980 and 1981) and the Vestíbulo chamber where only a 1 m square test unit (C-4) was excavated (campaigns of 1982, 1983 and 1984) (Jordá Pardo, 1981, 1982, 1983, 1984–85, 1986; González-Tablas et al., 1984; Jordá Cerdá et al., 1987; Aura et al., 1993; Jordá Pardo et al., 2003). Later, other researchers studied the molluscs from the excavations of Manuel Pellicer Catalán (La Mina and La Torca chambers; see Serrano et al., 1995, 1997, 1998) and Ana M. de la Quadra Salcedo (Vestíbulo chamber; see Lozano-Francisco et al., 2003, 2004; Vera et al., 2003), with results similar to ours.

This paper presents the results from the study of gastropods in the Epipalaeolithic Unit (NV.4) recovered during excavations in the

Vestíbulo chamber by Francisco Jordá Cerdá between 1983 and 1987 (Fig. 1.3). Not presented here are the previously published materials from the C-4 test unit, which were studied using a different methodology. While this paper places an emphasis on the gastropods at Nerja Cave, shorter analyses including some of the data used here have been published previously in Jordá Pardo and Aura Tortosa (2009), and in Jordá et al. (2010).

2. Geological, stratigraphic and archaeological framework of Nerja Cave

Nerja Cave is located on the Mediterranean coast of southern Spain (Fig. 1.1), 1 km from the current coastline (UTM 30S VF26, $x = 424.695$, $y = 4.069.025$) at 158 m on the SW slope of the Almijara Sierra. The cave is formed in Triassic dolomitic marbles of the upper unit of the Almijara Nappe (Alpujarride Complex, Betic Range) (Sanz de Galdeano, 1993). A few meters south of the cave entrance, the Pleistocene alluvial fan of Maro extends to the sea (Guerra-Merchán and Serrano, 1993; Guerra-Merchán et al., 1999; Jordá Pardo, 2004). The inner area of the cave and its deposits has been intensively studied (Durán et al., 1993, 1998).

The galleries near the palaeo-entrance of Nerja Cave (Torca, Mina and Vestíbulo chambers) contain an important archaeological sequence of deposits dating from end of the Pleistocene and the greater part of the Holocene (Fig. 2). Different aspects of this

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