
Living on the Brittany coast in the Mesolithic period: from formation processes of shell middens to the socio-economic practices of the last hunter-gatherer-fishermen, the case study of Beg-er-Vil (Quiberon, France).

Marylise Onfray^{*†1,2}, Grégor Marchand^{‡1}, Catherine Dupont^{§1}, Guirec Querré^{¶1}, Diana Nukushina^{||3}, and Jean-Christophe Le Bannier^{**1}

¹Centre de Recherche en Archéologie, Archéosciences, Histoire (CReAAH) – Centre National de la Recherche Scientifique, Ministère de la culture – Université de Rennes, Bâtiment 24-25, , CS74205, 35042 Rennes Cedex, France, France

²Trajectoires - UMR 8215 – Centre National de la Recherche Scientifique : UMR8215 – MSH Mondes, bâtiment René Ginouvès, 21 allée de l'Université 92023 Nanterre cedex, France

³Universidade de Lisboa, Faculdade de Letras (UNIARQ) – Centro de Arqueologia da Universidade de Lisboa, Alameda da Universidade, 1600-214 Lisboa, Portugal, Portugal

Abstract

Because they particularly concentrate the faunal remains and artefacts, shell middens aroused the curiosity of archaeologists very early to document the socio-economic as well as funerary practices of Mesolithic communities. During the 2000s, archaeological research in Brittany focused on the faunal assemblages of the four available shell middens (Hoedic, Téviec, Beg-an-Dorchenn and Beg-er-Vil) variously excavated and preserved, as well as on their contributions to the understanding of the use of maritime spaces. Nevertheless, it remained difficult to appreciate the diversity of human behaviour involved in the formation processes of shell middens and their role in the spatial organisation of settlements. This is the whole interest of the geoarchaeological approach, which involves soil micromorphology. This approach recently pointed to important advances at sites in the Tagus and Sado valleys in Portugal and across the Atlantic in Brazil. Indeed, applied to this type of context, it makes it possible to specify the diversity of human activities that took place there and their rhythmicity. For the first time in France, we were able to develop this approach on the shell middens of Beg-er-Vil (Quiberon, Morbihan). Following the first surveys carried out in the 1980s by O. Kayser, a multi-year program was carried out between 2012 and 2018 to continue the excavation of the shell middens and its adjacent sectors. Located on

*Speaker

†Corresponding author: onfray.marylise@live.fr

‡Corresponding author: gregor.marchand@univ-rennes1.fr

§Corresponding author: catherine.dupont@univ-rennes1.fr

¶Corresponding author: guirec.querre@univ-rennes1.fr

||Corresponding author: dnukushina@campus.ul.pt

**Corresponding author: jean-christophe.le-bannier@univ-rennes1.fr

the edge of a cliff, this site has been partly eroded and destroyed, limiting our knowledge definitively. However, the archaeological excavation has revealed imposing fire structure and post blocking from two housing units in the direct vicinity of the shell middens. By applying an adapted recording protocol (plan survey and recording of the remains with a total station) and a cross-approach of the various preserved remains - including the sediments considered here as cultural archives - this site constitutes a true study laboratory. All of the sediments in the shell midden were systematically sieved with water, followed by dry sieving. In addition, systematic sampling by stratigraphic units and by 50x50 cm quad for pH and chemical analysis was carried out. A strategy for spatial sampling of stratigraphic sections and evidence berms for oriented blocks samples was implemented as early as 2013, in order to carry out soil micromorphology analyses.

Based on micromorphological and microstratigraphic results, the objective of this paper is to present a synthesis of the geoarchaeological data acquired to determine the nature and intensity of the human activities that led to the formation of the shell midden. These results will be put into perspective with archaeological data such as those obtained on crabs and marine molluscs, for example. Thus, they will make it possible to discuss the relationship between the use of fire structures and the shell midden and, more generally, the place of the latter within the occupation. In the same way, by specifying the rhythms of the formation of the shell midden, the occupation dynamics of the site and more broadly the mobility of these last communities of hunter-gatherer-fishermen of the French Atlantic Coast will be discussed.

Keywords: Shell midden, Mesolithic, Brittany, Geoarchaeology, Soil micromorphology, Chemical analyses, Formation processes, Spatial analyses, Malacology