

ANNUAL REPORT: Cova Gran 2018 FIELD SCHOOL

Directors: Dr. Jorge Martínez Moreno. Universitat Autònoma de Barcelona, Catalonia - Spain
Dr. Rafael Mora. Universitat Autònoma de Barcelona, Catalonia – Spain
Dr. Alfonso Benito. CENIEH, Spain



Cova Gran 2018: sampling a hearth by soil micromorphology

From 2004, the *Centre d'Estudis del Patrimoni Arqueològic* of the *Universitat Autònoma de Barcelona* coordinated the Project of Investigation in *Cova Gran de Santa Linya* (Catalunya, Spain). Jorge Martínez-Moreno, Rafael Mora and Alfonso Benito-Calvo (CENIEH, Spain) are the coordinators of a long-term project of analyzing the human presence and cultural adaptation in the south Pyrenees for the last 50,000 years. After years of intense research, this consolidated project is well-known in the international paleoanthropology sphere, which is reflected in the scientific publications that have been generated in recent years. Since 2012, the support of the Institute of Field Research (IFR) has been essential to achieve the goals of this project.

This year, the research team was composed of six participants from Institute Field Research (IFR) and 4 staff members. General orientation of the 2018 season has not varied substantially to previous years. Largely, this is due to we are working on relatively large areas in Paleolithic sites (around 60 m²) whose excavation extends for several years, f.ex. Level S1D detected in 2009 and has been excavated continuously and finally been finished this year.

The Cova Gran field school aims to teach the methods and techniques required for excavating and cataloging the archaeological record. The emphasis of the field school on understanding fieldwork practices has the goal of highlighting how methodological decisions affect archaeological interpretations. The application of standards in Paleolithic sites generates detailed contextual information. Cova Gran is an excellent place to become familiarized with the particulars of Paleolithic archaeology through both fieldwork and laboratory activities. The

complex formation processes of the site in Cova Gran results in challenging excavation work. The fieldwork and the data processing in the lab go hand-in-hand during the duration of the field school. This strategy allows for the contextual data of the archaeological record to be verified daily and to guide the excavation the next day. This is a constructive research approach defined in Martinez-Moreno et al., 2015.

2018 fieldwork was focused in the Ramp area, which contains a Mousterian sequence that we started to excavate in 2003. Next to this sector, during previous years we have identified a new chrono-cultural sequence in sector V. By excavating those two sectors, we were able to determine the relationship between them, which correspond to different periods in the hunter-gatherer era. The data obtained in 2018 confirms this new phase -around 15-10 Ka-. This time period is previously unknown in Cova Gran and is poorly understood in the southern Pyrenees.

The IFR participants worked in both areas. Sector S corresponds with a challenging area that includes the succession of Middle Paleolithic levels S1D, S1E, S1F, identified by stratified hearths separated by less than 5 cm thick. This area was not easy to dig, even for experienced archaeologists. The goal for the IFR participants who had no prior experience in Paleolithic archaeology, was to explain how to use the excavation tools and to follow irregular layers, all while remaining in an uncomfortable position. These skills are acquired through a slow and patient apprenticeship. The participants eventually understood how to excavate and succeeded in their task to excavate this very challenging area. Participants in collaboration with staff participated in the extraction of soil micromorphology samples, a task requiring expertise (see photo). The archaeological attributes of sector V was different although it shared similar problems. The excavation required a certain degree of complex understanding of how to identify and recover the archaeological record. During the duration of the field school, the staff supervised the participants, guiding them to acquire the expertise until they were autonomous and collaborating actively to excavate the surfaces.

As critical as the fieldwork, the processing of the finds in the lab through washing, labeling, initial classification of artifacts and database work were essential for conducting a correct excavation. The archaeological material recovered was updated daily in the database to have precise information on the progress of the fieldwork.

Implementing this systematic process has been essential to ensure that all the students took part in every aspect of the field school. In the 2018 season, this was fully realized, despite the diversity of experience and backgrounds of the participants. Lectures about lab work, tool classification, and identification of contexts complemented the fieldwork that was conducted. Within a few days, students were already able to discuss object identification, function, and use. Students acquired excavation skills, participated in digging, selected artifacts while screening, cleaned material, and worked on data entry. Constant feedback between the fieldwork and laboratory activities is the best way to conduct research of Cova Gran. This objective was achieved during the 2018 season.

Cova Gran is promoting a broad line of research. Collaboration with the IFR has allowed the research team to publish a series of articles on Cova Gran in international journals, which can be consulted in ORCID (www.orcid.org/0000-0002-6326-7058) or repositories as Researchgate (https://www.researchgate.net/profile/Jorge_Martinez-Moreno/) or Academia.edu

(<https://uab.academia.edu/jorgemartinez>). In 2018, the following articles have been published or will be published:

- Mora, R. et al. 2018. Contextual, technological and chronometric data from Cova Gran: Their contribution to discussion of the Middle-to-Upper Paleolithic transition in northeastern Iberia. Quaternary International 474: 30-43. Final print version.
10.1016/j.quaint.2016.05.017
- Allué, E. et al. 2018. Montane pine forests in NE Iberia during MIS 3 and MIS 2. A study based on new anthracological evidence from Cova Gran (Santa Linya, Iberian Pre-Pyrenees). Review of Palaeobotany and Palynology 258: 62–72.
10.1016/j.revpalbo.2018.06.012
- Mora, R. et al. accepted. Inside the palimpsest: identifying short occupations in the 497D level of Cova Gran (Iberia) In Piccin and Cascalheria (ed): Short-term occupations in Paleolithic Archaeology: definition and interpretation. Springer.
- Martínez-Moreno, J et al. under review. A bunch of refits: the unstandardized blade knapping of the Early Upper Paleolithic assemblage of 497D in Cova Gran (Northeast Iberia) *Archaeological and Anthropological Sciences*