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# Human tracks in the cave of Fontanet (Ornolac-Ussat-les-Bains, Ariège, France).

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## Résumé

In the large complex of Fontanet cave (Ariège, France), the "réseau Wahl" constitutes a very well preserved gallery allocated to the Magdalenian. It extends along 263 m and can be divided in two areas according to geomorphological and archaeological criteria. The first area is characterized by its art, its human occupation (fireplace, lithic and bone remains), and the second by its numerous and various human tracks.

Here, we are particularly interested by the track areas that we have been studying since the beginning of 2018. Tracks, which are an original and fragile type of evidence, are often the only traces left by living beings on a site. Caves are a stable and ideal environment for recording and preservation of the tracks over time. When they are taken into account and protected, and when the geomorphologic setting is suitable, human and non-human tracks represent an important part of the evidence in caves. The exceptional preservation of Fontanet tracks, their number and their variety allowed us to perform an extensive ichnological study in order to better understand the human occupation of the cave and discuss the characteristics, behavior and activities of people who occupied the cave.

Our non-invasive study is based on field observation, inventory and accurate 3D modelling of tracks; these techniques allow us to quantitatively (morphometric and dynamic analysis) investigate the tracks assemblage. In parallel, an experimental study has been conducted to evaluate the impact of taphonomic parameters on the current shape of the fossil tracks and to help us in their interpretation. Our comparative fossil database includes the tracks discovered in the cave of Cussac (Dordogne, France), currently under study and ca. 50 silicone elastomer casts of tracks from other prehistoric sites.

**Mots-Clés:** ichnology, cave, tracks, traces

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