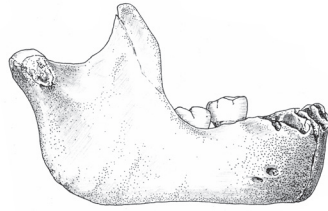


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New Neandertal remains from Trou Magrite, Belgium

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Trou Magrite is a cave site located at Pont-à-Lesse in the Lesse Valley, commune of Dinant, Belgium. It has been known since E. Dupont conducted excavations at the site in 1867 [1]. The most recent fieldwork was done by L. Straus and M. Otte in 1991-92 [2]. Trou Magrite yielded rich lithic assemblages, osseous artifacts, mobiliary art, and numerous faunal remains. Several human remains were also recovered and identified as Palaeolithic humans by E. Dupont but have been only partially published thus far. The archaeological record covers a broad time range spanning from the Middle and Upper Palaeolithic to the Mesolithic, Neolithic, and Iron Age. An important Middle Palaeolithic collection is present, probably representing several occupation phases during the Late Pleistocene [2]. Unfortunately, although E. Dupont conducted excavations that can be characterized as modern for that time, the materials from the different so-called “fauna-bearing levels” that he defined in the field were mixed post-excavation [3]. In 2015, we initiated a multidisciplinary re-assessment of the human and faunal collections from Trou Magrite in order to update the inventory of human remains already identified, check for the presence of human remains that may have been previously overlooked, and verify their chronocultural context. We revised the already known human collection, conducted a systematic sorting of the faunal material, and combined the use of morphometrics, taphonomy, stable isotopes, dating, and genetic analyses to perform taxonomic and chronocultural identifications. Here we present two previously unidentified Neandertal fossils that we isolated from the Trou Magrite faunal material excavated by E. Dupont in the 19th century. They represent two different individuals: an adult/adolescent, represented by an upper right permanent canine, and a neonate, represented by the diaphysis of a left femur. Whereas no endogenous DNA was recovered from the tooth, the palaeogenetic analyses of the neonate femur confirmed its Neandertal status and indicate its sex to be male. We will present the biological characteristics and mitochondrial DNA phylogenetic position of the Trou Magrite Neandertals, in particular with regard to the other Northern European Neandertals. Our project adds Trou Magrite to the list of Belgian sites that have yielded Neandertal fossils and helps to emphasize the importance of the Mosan Basin in Neandertal studies.

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