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# Archaeological evidence for freshwater fish exploitation during the Mesolithic: a case study from the Doubs catchment basin (Jura, Eastern France)

Anne Bridault<sup>\*†1</sup>, Annelise Binois-Roman<sup>‡2,3</sup>, Déborah Frontin, Christophe Cupillard<sup>§4,5</sup>, and Christophe Petit<sup>¶6,7</sup>

<sup>1</sup>Archéologie et Sciences de l'Antiquité- Archéologies environnementales (ArScAn - UMR 7041) – UMR 7041, Nanterre, France – France

<sup>2</sup>Université Paris 1 Panthéon - Sorbonne – Université Paris 1, Panthéon-Sorbonne : UFR03 – Paris, France

<sup>3</sup>Archéologies et Sciences de l'Antiquité- Archéologies environnementales (ArScAn - UMR 7041) – UMR 7041, Nanterre, France – France

<sup>4</sup>SRA Bourgogne-Franche-Comté – Service Régional de l'Archéologie – Besançon, France

<sup>5</sup>Laboratoire Chrono-environnement UMR 6249 – UMR 6249 Chronoenvironnement – Besançon, France

<sup>6</sup>Université Paris 1 Panthéon-Sorbonne UFR 03 – Université Paris1 Panthéon-Sorbonne – 3 rue Michelet 75006 Paris, France

<sup>7</sup>Archéologies et Sciences de l'Antiquité- Archéologies environnementales (ArScAn - UMR 7041) – UMR 7041, Nanterre, France – France

## Abstract

Research focusing on post-Pleistocene adaptations has since the mid-1960s evidenced two recurring trends: a general diversification of the array of species that are exploited, and an efficient use of small-bodied, highly productive food sources. Binford (1968) argued that in the Old World, archaeological evidence for the Terminal Palaeolithic and Mesolithic periods suggests a widespread dependence on aquatic resources associated with a higher degree of sedentism, population growth and food storage. Some fifty years later, the few ichthyo-archaeological studies still leave such hypotheses open to further investigations.

Fish bone remains originating from four archaeological sites of the Doubs hydrographical basin (Jura, France), including one very large assemblage (> 9300 NISP) dating from the Boreal chronozone, were analyzed by D. Frontin. The study aimed to characterize fishing practices and their role in human subsistence in a context of inland sites in which fishing was always associated with large game hunting.

The results highlight that cyprinids (including roach and bream), salmonids (probably trout), grayling, burbot, perch and eel were caught and eaten directly on site, apparently without

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\*Speaker

†Corresponding author: [anne.bridault@cnrs.fr](mailto:anne.bridault@cnrs.fr)

‡Corresponding author: [Annelise.Roman-Binois@univ-paris1.fr](mailto:Annelise.Roman-Binois@univ-paris1.fr)

§Corresponding author: [christophe.cupillard@culture.gouv.fr](mailto:christophe.cupillard@culture.gouv.fr)

¶Corresponding author: [christophe.petit@univ-paris1.fr](mailto:christophe.petit@univ-paris1.fr)

any prior preparation. The refuse was discarded in the immediate vicinity, often around hearths. By reconstructing the size and weights of the prey, it was possible to estimate the fishing techniques and the food contribution of the different fish taxa. Fishermen seem to have favoured intermediate river environments, such as shallow banks or side channels, most suitable for setting fish-traps. Fishing appears to have been optimized to maximize yield-to-effort ratios.

Binford, L.R. 1968. Post-Pleistocene adaptations. In Binford, S.R., Binford, L.R. (Eds), *New Perspectives in Archeology*. Aldine, Chicago, pp. 313-341.

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