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# Anthropogenic impact and environmental changes from middle Mesolithic to late Neolithic in Normandy at Cairon (Western France).

Laurence Lemer<sup>\*†1,2</sup>, Agnès Gauthier<sup>1</sup>, Laurent Lespez<sup>3</sup>, Axel Beauchamp, and François Giligny<sup>2,4</sup>

<sup>1</sup>Laboratoire de géographie physique (LGP) – Université Panthéon-Sorbonne, Université Paris-Est Créteil Val-de-Marne - Paris 12, Centre National de la Recherche Scientifique : UMR8591 – bat. Y 1 Place Aristide Briand 92195 MEUDON CEDEX, France

<sup>2</sup>Trajectoires - UMR 8215 – CNRS : UMR8215, Université Paris I - Panthéon-Sorbonne – UMR 8215 Trajectoires MAE 21 allée de l'Université 92023 Nanterre cedex, France

<sup>3</sup>Laboratoire de géographie physique (LGP) – CNRS : UMR8591, Université Paris-Est Créteil Val-de-Marne (UPEC) – Meudon, France

<sup>4</sup>Université Paris 1, Panthéon-Sorbonne – Université Paris 1 – UFR Histoire de l'art archéologie, 3 rue Michelet 75006 PARIS, France

## Résumé

The site of Cairon is located in the Vey valley, at about 250 meters from the Middle Neolithic settlement of " la Pierre Tourneresse ". Archaeological excavations have allowed to distinguish three occupation phases between the Middle Neolithic I and II. The two first phases correspond to the remains of a religious area, and then of a domestic settlement. According to the archaeobotanical and archaeozoological data, at the beginning of the Middle Neolithic II the forest is already interspersed by clearing. It attests too that agropastoral activities exist around the settlement. The last phase corresponds to the building and the use of a cairn. Previous pollen analysis on an off-site core (Cairon) supplies limited information about agropastoral practices during this period. Results don't allow to correlate intra-site and off-site records.

New high-resolution multi-proxy analyses (pollen, non-pollen palynomorphs, macroscopic charcoals, magnetic susceptibility and C/N ratio) have been carried out on a new core (Cairon 2016). Chronology of Cairon 2016 is based on a stratigraphic correlation between Cairon 2016 and the former cores, and 6 radiocarbon dates. According to the age depth model, this sequence covers the Mid-Holocene approximately between 7300 - 7000 and 3500 - 3300 cal. BC. Thus it covers the whole of the Middle Neolithic.

The aim of this communication is to present new data: 1) to show environmental consequences of the rapid climate changes that occurred during the Mid-Holocene; 2) to characterize agricultural practices during the Middle Neolithic period; 3) and to study agrarian landscape structure. Until the Middle Neolithic I (c. 4400 cal. BC), environmental changes are mainly due to the water table variations. The first anthropogenic indicators and the increase in macro charcoal particles coincide with the first occupation phase. But presence of

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\*Intervenant

†Auteur correspondant: laurence.lemer@lgp.cnrs.fr

cereals cultivation is only attested during the domestic settlement phase (c. 4200 – 4000 cal. BC). Following the building of the cairn, anthropogenic indicators become more irregular. From this period our data may reflect the integration of the Cairon valley bottom in a wider agrarian system.

**Mots-Clés:** Anthropization, Pollen analysis, Valley bottom, Middle Neolithic, Western France