
Population Change in the British Neolithic: Results from ancient DNA.

Thomas Booth*^{†1}, Selina Brace¹, Yoan Diekmann², Zuzana Faltyskova², Oliver Craig³, Nadin Rohland⁴, Swapan Mallick⁴, and Iñigo Olalde⁴

¹The Natural History Museum – The Natural History Museum Cromwell Road London SW7 5BD, Royaume-Uni

²University College of London [London] (UCL) – Gower Street, London WC1E 6BT, Royaume-Uni

³University of York [York, UK] – Heslington, York, YO10 5DD, Royaume-Uni

⁴Harvard Medical School [Boston] (HMS) – 25 Shattuck Street Boston, MA 02115, États-Unis

Résumé

The relative roles of migration, admixture and acculturation in the European Neolithic transition to farming have been debated for over 100 years. Studies of ancient DNA indicate predominantly Near Eastern ancestry for Continental Neolithic farmers, but also variable admixture with local Mesolithic hunter-gatherers, both during the spread of agriculture, and later. In Britain, at the margins of the expansion, the tempo and nature of the Neolithisation process remains unclear. There are cultural affinities between areas of Neolithic Britain and northern France, but the extent to which any cross-Channel interactions involved movements of people and genes has been a source of intense debate. Here, we present genome-wide data from British Mesolithic and Neolithic individuals spanning the Neolithic transition. These data indicate population continuity through the British Mesolithic but discontinuity after the Neolithic transition, c.4000 BC. These results provide overwhelming support for agriculture being introduced to Britain primarily by incoming continental farmers, with surprisingly little evidence for local admixture. We find a strong genetic affinity between British and Iberian Neolithic populations, suggesting that the British Neolithic population mostly derived from movements of farmers up the Atlantic façade. However, we also find evidence for prior introgression with Central European Neolithic populations, suggesting these two groups met and mixed to some degree, probably somewhere in France, before moving into Britain. We find no genetic structure amongst our British Neolithic population, suggesting that they were derived either from a single source population, most likely from north-western France, or from several dispersals of genetically homogenous populations from across the northern European mainland.

Mots-Clés: DNA, Britain, Neolithic, population

*Intervenant

[†]Auteur correspondant: t.booth@nhm.ac.uk