PALAEONTOLOGY

Migrant nation

Ewen Callaway revels in an exhibition chronicling the ebb and flow of early humanity over the British Isles.

Despite what some politicians say in these inward-looking times, Britain is and always has been a nation of immigrants. Even the palest Brits descend from Middle Eastern stock or other waves of foreigners, beginning with the arrival of agriculture. *Britain: One Million Years of the Human Story* — an enlightening and engaging exhibition at the Natural History Museum (NHM) in London — lays out the evidence for an immensely long history of migration, ebbing and flowing over the millennia.

The exhibition is the fruit of a 13-year research project led by the NHM, the Ancient Human Occupation of Britain. It shows that Britain hosted ten distinct occupations of various hominin species (described as humans throughout the exhibition) between around 1 million and 12,000 years ago. "Nine of them died out, and we are the tenth," says Chris Stringer, research leader in human origins at the NHM.

For many, the show's biggest appeal will be the geography, not the genealogy. Those 900,000-year-old hand-axes once used to butcher big game? They were found near a wide sandy beach in Norfolk, popular with dog-walkers. That 200,000-year-old hippopotamus skeleton? Pigeons now pace Trafalgar Square in the heart of London, where it was dug up. For an exhibition about the human past, there are surprisingly few human bones on display. This is not a curatorial oversight, but a consequence of the dearth of human fossils in Britain. The show may be better for it. Because it is forced to rely on evidence such as stone tools and marked animal bones, it demonstrates how researchers make inferences about the people who left such artefacts behind.

Take the first humans to inhabit Britain, more than 900,000 years ago. An intriguing find revealed just last month shows that they may have belonged to the species *Homo antecessor*, first discovered at Atapuerca in northern Spain. A team including Stringer found footprints embedded in stone near Happisburgh on the Norfolk coast, and speculated that the appearance and the gait of the humans who made them would have been similar to those of *H. antecessor*. A short documentary film and photo display of the footprints — now eroded away by the sea — are shown.

Britain: One Million Years of the Human Story
Natural History Museum, London. Until 28 September 2014.

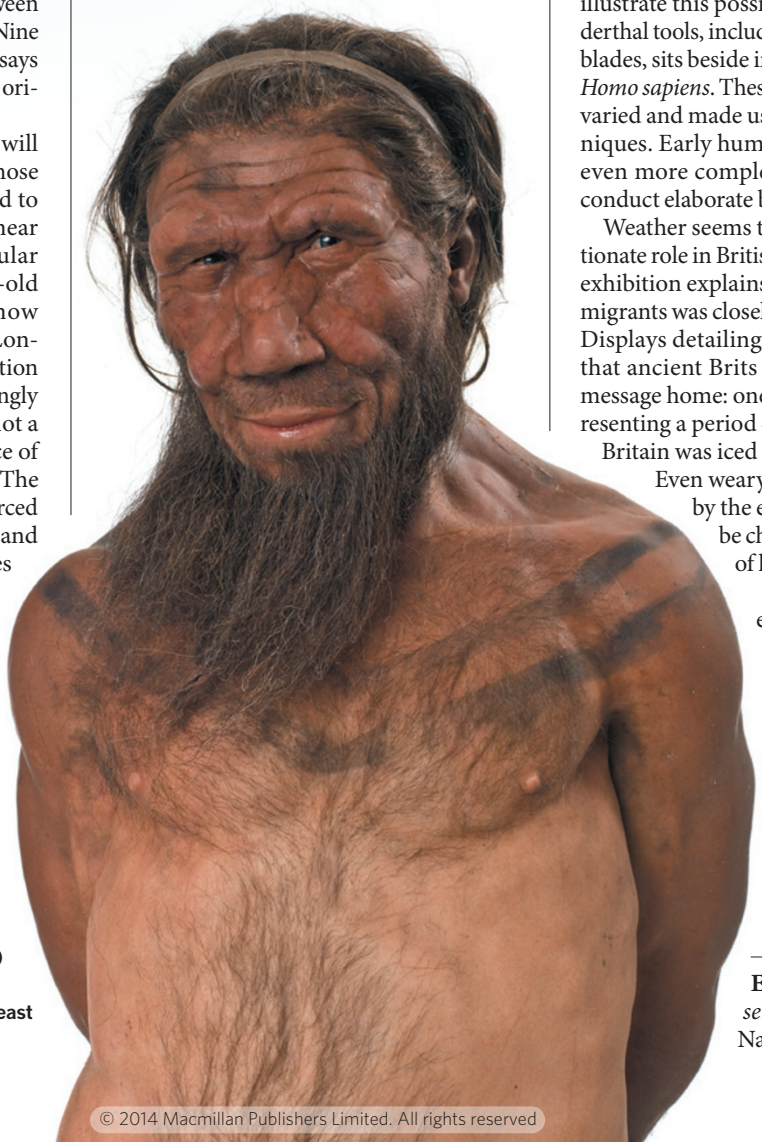
The next humans to call Britain home may have been *Homo heidelbergensis*, known from fossils in Germany and elsewhere. This exhibit points to large flint hand-axes found alongside the butchered remains of a rhinoceros near Boxgrove, West Sussex. A film re-enacting the grisly slaughter threatens to overshadow a fascinating exhibit nearby: electron micrographs of the scored rhino bones, which helped to show that the damage was caused by human butchery rather than environmental weathering.

Neanderthals, the big-bodied hunters who lived in Europe and western Asia, came as least twice to the British Isles, which were intermittently connected to continental Europe. The Neanderthals' first stretch in Britain, 400,000–200,000 years ago, was interrupted by a harsh cold snap that made the area uninhabitable for humans. The rise of waters with rapid warming then turned Britain into an island, preventing continental Neanderthals from returning until alternative routes opened up. Their second visit, starting less than 100,000 years ago, may have been interrupted by anatomically modern humans who arrived from Africa some 60,000 years later.

Many details of the relationship between Neanderthals and modern humans stand on scientifically thin ice, but the exhibition mostly avoids just-so stories (Did they battle? Did they breed?). Instead it presents a nuanced hypothesis, influenced by Stringer's thinking, that Neanderthals could not or did not adapt to changing climate and competition for resources, and slowly died out. To illustrate this possibility, an array of Neanderthal tools, including hand-axes and stone blades, sits beside implements fashioned by *Homo sapiens*. These tend to be lighter, more varied and made using more efficient techniques. Early humans went on to develop even more complex tools and art, and to conduct elaborate burials.

Weather seems to have had a disproportionate role in British life from the start. The exhibition explains how the rise and fall of migrants was closely tied to climate change. Displays detailing the plants and animals that ancient Brits encountered drive this message home: one is an empty room, representing a period 450,000 years ago, when Britain was iced over and uninhabitable. Even weary museum-goers enticed by the empty benches will soon be chased off by a soundtrack of howling winds.

The discoveries unearthed by the Ancient Human Occupation of Britain project have twice pushed back the date of Britain's earliest human occupation. "With further work there could be even older evidence of humans in Britain," Stringer says. Revel in it: yet more immigrants. ■



TRUSTEES OF THE NHM, LONDON

Neanderthals (reconstruction) migrated to the British Isles at least twice.

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