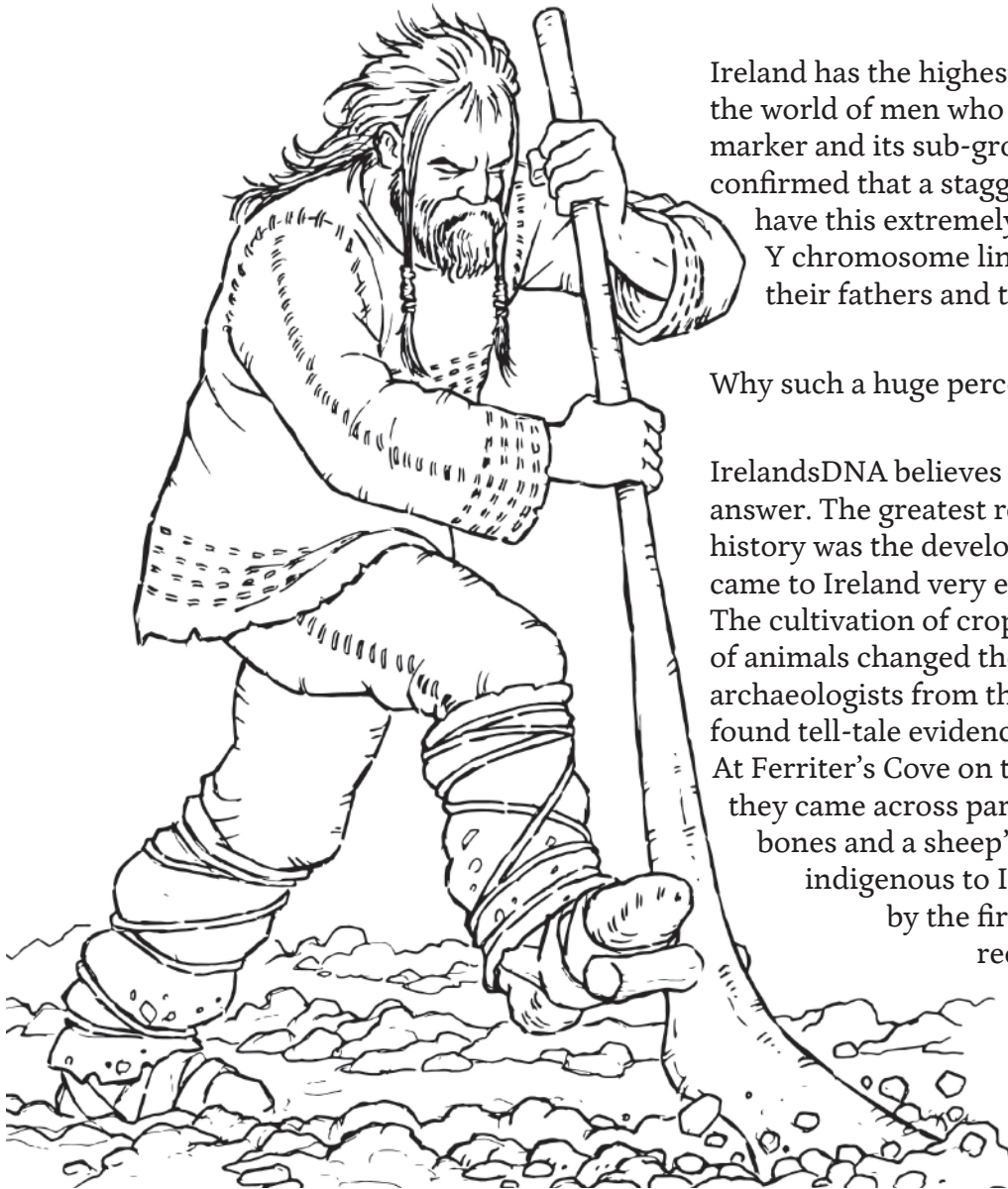


Prehistoric Genocide in Ireland?



Ireland has the highest concentration in the world of men who carry the R1b DNA marker and its sub-groups. Recent testing has confirmed that a staggering 84% of all Irishmen have this extremely successful and vigorous Y chromosome lineage, inherited from their fathers and their fathers before them.

Why such a huge percentage?

Ireland's DNA believes it has worked out an answer. The greatest revolution in world history was the development of farming and it came to Ireland very early, earlier than Britain. The cultivation of crops and the domestication of animals changed the world utterly and archaeologists from the University of Cork found tell-tale evidence on the southern coast. At Ferriter's Cove on the Dingle Peninsula they came across part of a flint knife, cattle bones and a sheep's tooth. Sheep are not indigenous to Ireland and were brought by the first farmers. Carbon dating reckoned that these animals lived around 4350BC, the approximate period when the first farmers made landfall, probably in currachs.

These men may have carried the Y chromosome lineage of G. Early farmers in Europe certainly had it and ancient DNA extracted from skeletons in a prehistoric cemetery in France suggests groups of incoming men with the new skills who took native women as partners. Indeed 26 of 31 farmer skeletons tested from three sites in Germany, France and Spain belong to the G group, as does Ötzi the famous ice man of 3300 BC (84% of farmer skeletons are in the G group). The farmers show clear genetic links to the Near East where they originated.



Ötzi the famous ice man of 3300 BC

The G-Men may have established farming in Ireland but their successful culture was almost obliterated by what amounted to an invasion, even a genocide, some time around 2,500BC. The frequency of G in Ireland is now only 1.5%.

Very recent research using whole Y chromosome sequence data has tentatively dated the origins of R1b to the middle of the third millennium BC. This is the time of a dynamic group known as the Beaker People. Characterised by their production of fine pottery (sometimes known as bell beakers), the new skills of metalworking and a fascination for archery, they came north from Iberia to colonise Ireland and they appear to have been ruthless in replacing the men who carried the G and other lineages. Evidence of the association of R1b with the Beaker folk comes from a number of sources. Firstly, two skeletons from a Beaker site in Germany are the only ancient humans reported so far to carry R1b. It has never been found in the bones of anyone – farmer or hunter-gatherer – earlier than 2600 BC, or indeed later. Second, the distribution of R1b, in particular the S116 subgroup which accounts for most Irish R1b, is related to the geographic spread of the Beaker culture, and S116 is thought to have originated in Iberia. Third, there is a strong correlation within Italy of the frequency of an S116 subgroup called S28 and the distribution of bell Beaker sites. Finally, whole Y chromosome data reveals a massive expansion in numbers at around this time, a starburst of new lineages can be seen, as each man had many sons, so the population of R1b was increasing rapidly in size.

Beakers are found in very large numbers in Ireland and a viciously sharp copper-bladed halberd came to light at Carn, County Mayo. The Beaker smiths made gold lunulae, neckpieces shaped like

crescent moons but perhaps their most spectacular legacy was the complex of copper mines at Ross Island in Killarney National Park. It exported large quantities of copper to Britain.

One of the richest and most revealing prehistoric burial sites was discovered in 2002 near Stonehenge. Immediately dubbed The Amesbury Archer, the individual was in fact a metal worker, a smith. In addition to his last, the grave contained gold and copper objects as well as beakers. But like many Beaker burials, it also produced the remains of archery kit – flint arrowheads and a wristguard. It may well be that archery gave the invading carriers of R1b a clear military advantage as they fought to seize land from the first farmers, the men with G lineages. Four thousand years later, English longbowmen made a decisive difference against larger armies in the pivotal battles of The Hundred Years War, at Crecy, Poitiers and Agincourt. Perhaps the R1b bowmen enjoyed a similar advantage in prehistoric Ireland. Archery was certainly important to them.

More evidence for rapid and decisive change in prehistoric Ireland can be found in studies of mitochondrial DNA, what mothers pass on to their children. Recent analysis of ancient maternally inherited mtDNA also reveals that European hunter-gatherers carry a different mix of lineages from the first farmers, who in turn are different from the later Beaker folk. Like their Y chromosome counterparts, the early farmer mtDNA lineages are now rare in modern Europeans, while the lineages found in Beaker skeletons are more common, particularly in Ireland and western Europe. This provides strong independent evidence for a series of folk migrations across Europe, culminating in the takeover of Ireland.

The carriers of R1b almost certainly brought the Irish language. It is thought that around 2,500BC the common Indo-European language spoken in much of Europe had begun to break up into dialects. These included Celtic which is attested in various forms in ancient Iberia. Eminent prehistorians argue that the ancestor of Irish, Welsh, Scots Gaelic and Cornish made its way up the Atlantic-facing coasts by way of enclave colonization and perhaps also as a language of trade and exchange. And one of the most famous texts in Irish, the Lebor Gabala Erenn, the Book of the Taking of Ireland, recounts a migration from Iberia. It may well be the memory of a real invasion.

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Notes to Editor:

Launched in April 2012, IrelandsDNA immediately set out to innovate. By combining historical analysis with the genetic information that can be gleaned from testing for ancestral DNA, we aimed to achieve a new understanding of Ireland's history – a people's history.

A commercial company closely involved in scientific research, IrelandsDNA offers a unique package of information featuring thorough historical analyses of results currently unmatched by any other European DNA ancestry testing company.