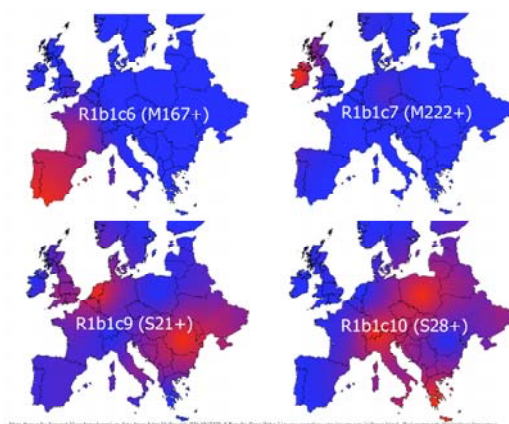


## Summary: 11 The False Spring

Like all other land-based animals, in one way or another we are dependent upon grass. When we talk about the Ice and the population movements it promoted, we need to realise it was probably the arid conditions and consequent death of grass which made the animals move away and our ancestors had to follow. But the reverse also was true: as the Ice melted, water once more became available and grass and other food for game began to grow. As the game moved out once more into Europe, once again our ancestors followed them. They did not have known destinations: they merely followed the game. Generally, this in turn meant following the river valleys — or beaches.

**The Younger Dryas:** The global warming and moistening of Europe as the Ice melted around 14,500 years ago led to a false spring which ~ 12,700 years ago ended with a sudden cold snap which once again plunged the earth into the freezer. This, the " Younger Dryas " ended as suddenly as it began after about 1,300 years. Significantly, the end of the Younger Dryas about 10 kya marks not only the end of the Palaeolithic and the beginning of the Mesolithic but also the end of the Pleistocene and the beginning of a new epoch, the Holocene in which we are now living. The relative stability of the Holocene and the warm, moist climate over much of the earth has made possible the change from the nomadic hunter-fisher-gather lifestyle of the Pleistocene to the settled existence of the Neolithic, the widespread adoption of agriculture, the domestication of some animal species and the use of ceramics. The climate of the Holocene has also made possible the horrendous expansion of human populations and associated extinction of other animal species....

**The Franco-Cantabrian émigrés:** Of the three major refugia, it was the Franco-Cantabrian which seems to have contributed most to the re-population of the Atlantic seaboard of Western Europe during the period between the end of the LGM and the YD. Although his results need be read with some caution, Oppenheimer in *The Origins of the British* describes several "clusters" of people who left the Basque refuge and travelled north during this False Spring. Their genetic signatures were variations of the *Basque Modal Haplotype*. In comparison, those groups which left the Basque refuge after the Younger Dryas — the Mesolithic emigrants — had by then accumulated an extra mutation of DYS391, giving them an allele of 10 which, as Oppenheimer points out, placed them on the *Atlantic Modal Haplotype*.



No matter when they emerged from the Basque refuge, all these people belonged to y-Haplogroup R1b1c or subclades of it. This was derived from the earlier R1b founded when the mutation M343 occurred somewhere on the steppes of Central Asia but which in its original form probably did not reach Europe or, if it did, the harsh climatic conditions before the LGM and then the bottleneck created by the LGM itself possibly wiped them out. Later, "downstream" mutations of R1b were carried into the new continent so that these days, the majority of European men belong to descendants of these

haplogroups. This includes roughly 70% of English men, 95% of Spanish men, and 95 % of Irish men. *NB: although "R1b" is often equated with the Aurignacian culture and therefore the first men to enter Europe, this is not proven.* Although the Younger Dryas returned Europe to

"deep freeze" conditions, the climate was not quite as bad as during the LGM and some of those people who had expanded northwards managed to cling on to life in the territories outside the erstwhile refugia.

**The "other" R:** A mutation on R1 somewhere in the Eurasian Steppes north of the Black and Caspian Seas resulted in the "other R", R1a. Not as prolific as its brother, R1b, this lineage is still relatively young, the frequency of the R1a1 gene in contemporary populations suggesting that it originated about 15 KYA, probably in the Ukrainian refugia during the LGM at the end of which it spread up the Dnieper River valley into those parts of Europe peopled these days by speakers of Balto-Slavic languages, especially Hungary, Poland, Ukraine, and Russia where generally speaking, one out of every two males carries this mutation. About a quarter of Icelandic males also carry it as do many in the British Isles. Clearly, it was carried to both those locations by the Vikings. One of the best known descendants of R1a in Britain was *Somerled*, founder of Clan Donald! R1a1 also moved westwards where today it is found in Central and Western Asia and in that melting pot of genetic haplogroups, India. Modern theories tend to associate this haplogroup with speakers of the Proto-Indo-European language of the Kurgan culture and indicates that there were probably three waves of spread, only the first of which was the expansion from the Ukrainian refuge. The second wave occurred between 3000 and 1000 years ago from the Pontic steppes while the third (and controversial) was a Slavic migration between the 5<sup>th</sup> and 7<sup>th</sup> Centuries AD.

**The "Northern Barbarians":** Apart from R1b1c and its sub-clades, the most common y-haplogroup in Europe is Haplogroup I and its many subclades, particularly I1a. This is thought to have been brought into Europe by the Gravettian culture, up the river valleys of the Danube and its tributaries between 25 and 20 KYA. Then, when the LGM approached and conditions further north and west became increasingly too harsh, the descendants of those people found their way back down those same valleys to the mouth of the Danube in what is called the Balkan refugia. Like Haplogroup R, I is a descendent of F, one of the three original emigrants from Africa, although I mutated several generations earlier as the composite haplogroup, IJ, son of F. This composite group later split into two separate haplogroups, I and J (mutations S2 and S22), both of which play an important part in populating Europe, particularly in the Neolithic. Although Haplogroup I is found in low concentrations elsewhere, it occurs in frequencies above 10% only among Germanic, Slavic, Uralic and Turkic people, as well as among Greeks, parts of Albania, Sardinia, Romania and France. Haplogroup I people have been called "the northern barbarians" of history, although in their defence, it must be said that R1b in Western Europe, R1a1 in Eastern Europe and a y-haplogroup we have not discussed, N, in northeastern Europe also figure prominently among the "barbarians" we read about in our history books.

Understanding Hg I has been made difficult by numerous name-changes in recent months so always check the year the name was applied. Considerable research has gone into extracting modal haplotypes by Ken Nordtvedt who has isolated haplotypes such as **I1a-AS (AngloSaxon)** (the most populous form), found in areas the Angles and Saxons are said to have come from; **I1a-N (Norse)**, the most populous form of I1a found in Sweden and Finland, and is a close second in Norway; **I1b2a-Isles** is found almost exclusively in the British Isles, heavily in Scotland and in the Basque region and Portugal. There are many more examples of such haplotypes. Research has also been done using SNPs. For example, **Hg. I1a** (M253, M307, P30, P40) is found in Scandinavia and Northwest Europe, with a moderate distribution throughout Eastern Europe and constitutes about 45% of total I. Or, among others, **Hg. I1b1b** (M26) which is typical of the population of the so-called "archaic zone" of Sardinia; also found at low frequencies among populations of Southwest Europe, particularly in Castile, Béarn, and the Basque Country.