

How many people the average British person is related to in previous generations.

It is not as simple as you have 2^{ngen} grandparents because of something called Pedigree collapse. There is believe it or not a paper from 1978 [1] which discusses how many people you are related to in previous generations. It is quite fascinating if you are of that kind of mathematical persuasion.

I combined it with historical population data from that most rigorous of sources Wikipedia [2] (Sorry, not sorry) and interpolated the data to produce the figure below.

It seems that we are related to the most number of individuals 25 generations back, which according to Wachter [1] was ~50% of the people who have descendants today and I figure about 38% of the people alive at the time.

The average Brit seems to be related to 45% of the people alive at the conquest before which the data gets very unreliable as there doesn't seem to be much in the way of population data about for that period. I assumed it stayed the same but that is unlikely to be true.

The population data itself is really interesting there a little decline in 1315 but nothing like the massive decline of the late 1300s where it nearly halves due to the black death.

If that doesn't give us pause for thought in these current times I don't know what does.

Regardless the average Brit is related to a lot more people that they think they are.

[1] Wachter KW (1978) Ancestors at the Norman Conquest, in Wachter KW, Hammel EA, & Laslett P (eds.) *Statistical Studies of Historical Social Structure*. London: Academic Press.

[2]

[https://en.wikipedia.org/wiki/Demography_of_England](https://en.wikipedia.org/wiki/Demography_of_England) retrieved 1 May 2020.

