

## DNA for Geo Mapping

There are two types of DNA Mapping:

1. **One type of DNA Mapping determines what characteristics you inherited from each of your two parents & your four grandparents by looking at the shared segments on each of the chromosomes. This is called: VISUAL PHASING.** Louise Rosett wrote an introduction article on this subject on page 26 of our AGS Quarterly dated May 2021. Louise, Philip Spivey & Martin Brady will go into further detail in their two Saturday classes on 16 October and 20 November 2021 at 1:30 PM as part of our AGS-ABC's of DNA Series.
2. **The second type of DNA Mapping determines your world geographical locations based on your female and male Haplogroups. This is the subject we will cover today. It is broken down into ANCIENT ROOTS & DEEP ROOTS.**

**CAUTION:** Most of the wonderful tools below require that you know & enter your Haplogroup(s): female for women and male & female for men. (See Haplogroup discussion in the final section below on page four.)

**ANCIENT ROOTS:** This tool, called SNP Tracker, is shared for free by Rob Spencer. It will trace your female or male Haplogroup back to DNA Eve & Adam in Africa, about 240,000 years ago. It also provides you with the mutations that modified each Haplogroup into what we see today. It also provides estimated dates for each Haplogroup transition. The default program traces the male Haplogroup. To trace the female Haplogroup you have to click on the male icon to the left of the "GO" Box in the top heading & it toggles to female. This tool has many interesting & fun features, which I will endeavor to demonstrate. Like most new tools, it is best to read the instructions (five pages) to maximize your experience & enjoyment. Maps & charts are generated that beautifully illustrate your ancient ancestry. They are also fun to show to family & friends.

Go to: <<< <http://scaledinnovation.com/gg/snpTracker.html> >>>

**This & several other tools I will demonstrate were mentioned by Dr. Maurice Gleeson in the wonderful AGS 24 April 2021 all-day Zoom seminar where he spoke for four sessions. The recordings of these four sessions are available until 26 May 2021. The link is: <https://vimeo.com/541432058/d591ac8435>**

## **DEEP ROOTS:**

**Family Tree DNA (FTDNA) is unique in having projects for geographical areas, Haplogroups & surnames. Joining a project is free for those who tested with FTDNA. Also, you can often get help from the volunteer project administrator. These projects are for mtDNA & Y-DNA, but NOT for atDNA. In the Saturday Zoom seminar by Maurice Gleeson on 24 April he mentioned that FTDNA has over 10,700 projects. I have found many of these projects to be very useful. They have at least two geographical projects pertinent to our discussion today: IRISH MAPPING & SCOTTISH MAPPING. You first select the project from your project list. Next, you select maps & then select your Y-DNA Haplogroup (or any other Haplogroup of interest) from a dropdown menu. For your own Haplogroup, it provides a map of your Haplogroup matches, and I will show you my matches. I have nineteen matches on the Irish Mapping Project & eight on the Scottish Mapping Project. If you wish, you are given the ability to contact each match, which I haven't done yet. Both projects also offer mtDNA maps, but they are not as useful. They show pins for every person who tested for mtDNA that claimed a link to the British Isles & NW Europe, as I will show you. I was unable to get this tool to sort the pins for my mtDNA Haplogroup H or H2 or H2a2b.**

**An important source for the geographical distribution of DNA in Europe & beyond is the very useful WEB site <<< [www.eupedia.com](http://www.eupedia.com) >>> where you can get & print heat maps of Europe for the distribution of every male (Y-DNA) & female (mtDNA) Haplogroup. I will show a few examples of these maps. They also offer a table which shows the Haplogroup distribution by percent for every country in Europe & beyond. There is also a chart for the Haplogroup distribution of ethnic groups such as Ashkenazi Jews & Sephardic Jews. I will show a few examples of these charts. For almost all of this information, they**

show you the sample size from which each of these map & table conclusions were drawn. There is also an extensive reference list.

For Irish DNA Mapping Information, the IRISH DNA ATLAS was published in 2017. It is based on DNA samples from 196 Irish people whose eight great grandparents were born within 50 km of each other in Ireland. These DNA results showed ten distinct genetic clusters roughly aligned with the ancient provinces or kingdoms of Ireland. Seven of the clusters are “Gaelic” and the other three are British-Irish found mostly in the North of Ireland, probably the result of the Ulster Plantations in the 1600s. They also found DNA evidence of Norwegian Viking ancestry. I obtained my copy of this 52-page report by Googling the title = IRISH DNA ATLAS. I will show the DNA map from this report.

For Scottish Mapping Information, you can get a similar 27-page 2019 report by Googling: “The Genetic Landscape of Scotland and the Isles”. It is based on DNA samples from 2,544 British & Irish individuals. A quote from their report says: “Many genetic boundaries are consistent with Dark Age kingdoms of Gaels, Picts, Britons and Norse.” I will show you one of the maps from this report.

A similar earlier study will be found at the People of the British Isles project published in 2015. It is based on 2,039 samples that fell into 17 clusters. Each individual sampled had to have four grandparents born with 50 km of each other. You can obtain this report at <<< [www.peopleofthebritishisles.org](http://www.peopleofthebritishisles.org) >>>.

#### **SURNAME & CLAN DISTRIBUTION MAPS:**

Many genealogists are interested in finding the location of their surname of interest in their target country. If you Google: Surname Map of \_\_\_\_\_, and obviously fill in the name of the country, you will often find multiple WEBSITE choices for each country. For instance:

AUSTRIA – 4, BELGIUM – 4, BRITON – 6, ENGLAND – 8, FRANCE – 4. GERMANY - 2, IRELAND - 9, SCOTLAND – 7, SWITZERLAND – 6, & WALES – 4.

Eupedia <<< [www.eupedia.com](http://www.eupedia.com) >>> offers SURNAME DISTRIBUTION MAPS for every country in Europe. Many of the sites that come up on Google offer more than one type of surname map. Sometimes they are for different eras of time.

I haven't yet had time to check all of these out, but many of these WEB Sites look very useful. Some of these WEB Sites will allow a search by surname, whereas others just give you a map full of surnames & you have the tedious job of finding your surname of interest – if it is even there.

#### **WHERE DO I FIND MY HAPLOGROUP(S):**

- A. The most complete male Haplogroup results are generated for men by taking a Y-DNA test at <<< [www.FTDNA.com](http://www.FTDNA.com) >>>. The most complete female Haplogroup results for both men & women are also generated at FTDNA by taking a mtDNA test. [Remember, a mother gives her mtDNA to all of her children, but only her daughters can pass it along to the next generation.]**
- B. Two DNA labs provide you with your Haplogroup(s) when you get your atDNA results. These companies are: 23andMe & LivingDNA. However, AncestryDNA & FTDNA's Family Finder test & My Heritage, unfortunately, don't provide any Haplogroup information - even though they have to know it to give you your estimated ethnicity results.**
- C. A man's female mtDNA Haplogroup result and a woman's mtDNA Haplogroup result provide their maternal line Haplogroup, which can be traced back to DNA EVE.**
- D. A man's male Y-DNA Haplogroup will trace his paternal line back to DNA ADAM.**
- E. Men have two Haplogroups, whereas women have only one.**

**<<< THE END >>>**