THE Y-DNA PROJECT

January 2019

Report from Elizabeth O'Donoghue/Ross, the Society's Group Administrator

We are at the beginning of another year, with a project of nearly 300 participants, including some folks who have only tested through Family Finder (Autosomal DNA), some ladies with O'Donoghue DNA, some gentlemen related to O'Donoghues through the female line and some folks who do not currently share the name but whose closest matches are O'Donoghues.

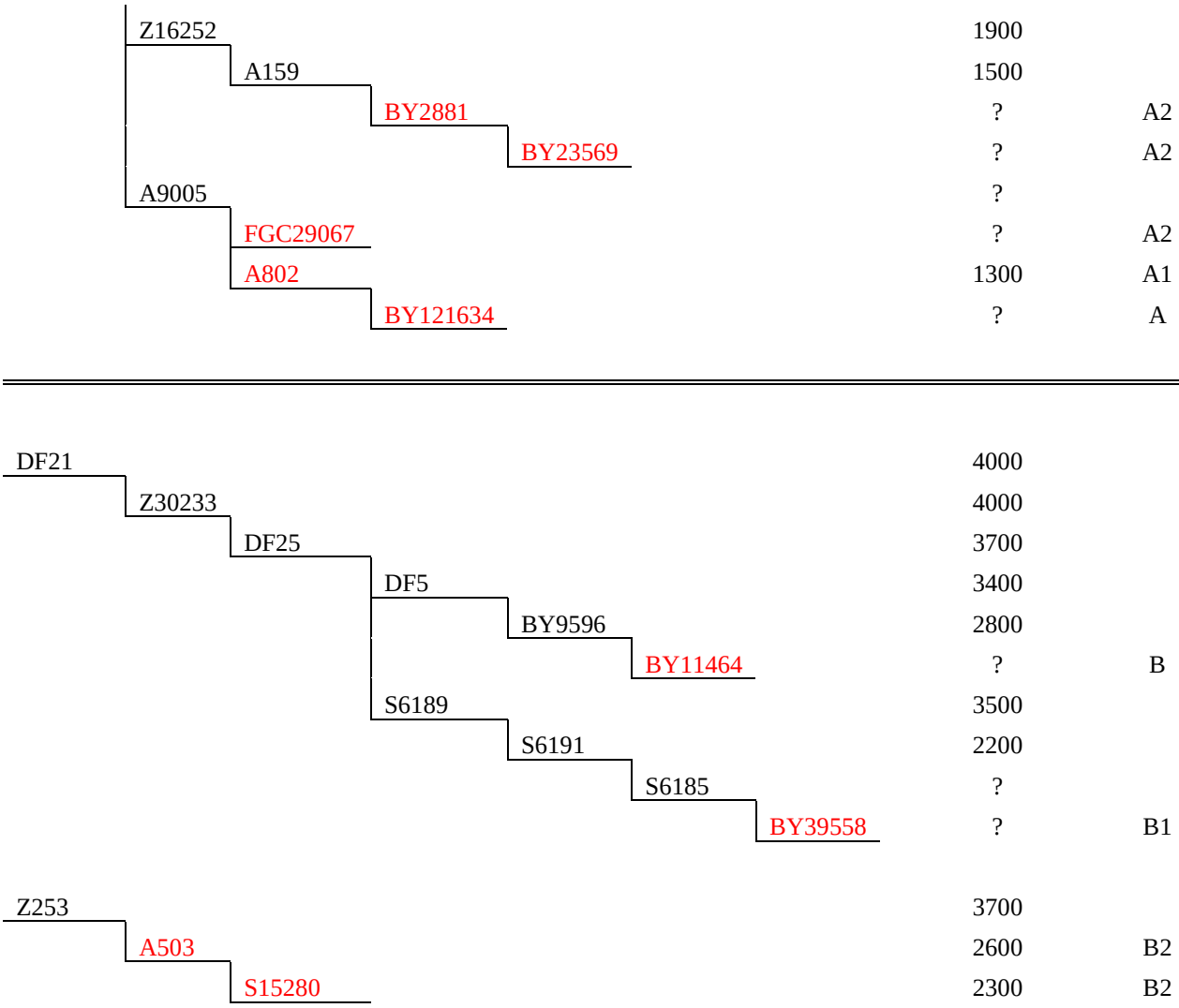
We have 71 kits who have tested to the full 111 markers, and 26 of those are also Big Y-500 testers. This level of investment provides the maximum amount of information available to us at Family Tree with which to research their genetic heritage.

We have discovered the surname, in its various spellings, has at least 14 historical tribes. The project has identified participants who surely or at least possibly belong to many of them. We are open to input from any of our members to explore other possibilities.

We have had participants in each of the three groups aligned to both the Eoghanacht Cashel/The Glens and the Eóganacht Raithlind/ Mór-Ross tribe test the Big Y by now, which has given us some very interesting insights into their genetic 'neighbours' and origins. At https://www.familytreedna.com/public/ODonoghue?iframe=ycolorized you can review the Family Tree website spreadsheet for reference. Those of you who are already participants, you can go to your Haplotree & SNPs link and see the haplotree there as well. Just search for the SNP name (control/f) and the system will bring it to you.

In the following discussion, I used ages as calculated on The Big Tree website at https://www.ytree.net/. I rounded the figures. If you choose to take a look yourselves. First click onto the particular haplogroup that interests you. Either go to 'P312>Z290>L21>DF13>FGC11134' for the CTS4466 group (it is just downstream of FGC11134) or 'P312>Z290>L21>DF13>DF21'. If you click on an individual SNP, you will go to a 'Block Information' page that will show the exact calculations and the confidence intervals associated with them. Not all SNPs currently have an age calculation. Those with fewer kits at the furthest branches are less likely to have the ages calculated due to limited data. I've created a short table below for reference. The red font numbers are those directly related to our participants. For simplicity's sake, there are numerous intermediate branches missing. There are question marks in the age column (unfortunately most of our red ones) for when either there is no age calculated or that given is based on few samples and doesn't seem accurate.

Tree	Branches	Age	Group
CTS4466		2300	



Eoghanacht Cashel/The Glens

The Glens tribe is part of the ancient Irish Type II haplotype prominent in Munster. Defined by the SNP CTS4466, the main branch itself has been estimated to have formed around 2300 years ago. Our research in the R1b-CTS4466 Plus Project suggests its origins is quite possibly in Wales, from whence early carriers of the SNP travelled to Munster and established themselves and flourished, becoming the dominant overlords throughout the territories, in both early tribes such as the Corca Laidhe and Corca Dhuibhne and the later Eoghanacht. This wide spread of the haplogroup across Munster makes it unlikely that the myth of Eoghan Mór is real in anything but the broadest sense.

There are discussions regarding the origins of CTS4466/Irish Type II at the Family Tree website for two other projects I administer, the R1b-CTS4466 Plus Project at https://www.familytreedna.com/groups/r-1b-cts4466-plus/about and the Munster Irish Project at https://www.familytreedna.com/groups/munster-irish/about.

The A and A1 groups of the spreadsheet are directly related to The Glens Chief, with a 17th cousin of Geoffrey's in the A group with him and more distant relations in the A1 group. The common SNP for both groups is A802, which has been estimated to by about 1300 years old.

Those in the A2 group are also Irish Type II but of other branches of the haplogroup. FGC29067 is closer to the Chiefly branch, being parallel to it. The others are on a different upstream branch of CTS4466. Those haven't been dated. Most of the A2 gentlemen are aware of their family origins – in Glenflesk, Kerry or Cork, supporting their inclusion in The Glens tribe, even if they are not directly related to the clan chief. Discounting instances of later adoption of the surname for any number of reasons, it is realistic to recognize that not all people living in the territory of and under the protection of the local chief would be genetically related through the male line. It has been found that a clan/surname with one eponymous ancestor invariably has a number of different haplogroups within it and perhaps 50% or so of a consistent haplotype that could be attributed to the clan chiefly line. The derbfine, comprised of four generations with a common great grandfather, elected the chiefs from within their family, but inevitable intermarriage within the tribe would make practically everyone related to each other in some way.

Eoghanacht Raithlind/ Mór-Ross

All three of the groups in the Eoghanacht Raithlind/Mór-Ross – B, B1, B2 – have been designated so from the outset of the project, based on their family origins and the apparent STR matches they exhibited. Originally, before SNP testing, we thought they were all 'related' cousins of some distance or other. SNP testing has proved otherwise. The B (chiefly line) and B1 groups both stem from the DF25 SNP, in one of the four main branches of DF21 defined by Z30233, but their genetic distance is great enough that they could not be 'related' within the timeframe of the historical tracts. The B2 group is in a different haplogroup – Z253. However, these three groups find themselves carrying the same surname, having similar physical characteristics and sharing a common geography. The puzzle has been, how and where did they originate, and what ties them together?

DF25 is estimated to be about 3700 years old. The B group is on the DF5 branch and just downstream of BY9596, which is about 2800 years old. The B1 group is on a different branch, S6189, just downstream of S6191, which is about 2200 years old. Now, those dates are old! Considerably older than the respective SNPs for The Glens folk.

Whether the main upstream SNP for both branches, DF21 (itself about 4000 years old), originated somewhere in the Isles is not certain, but likely. Y-DNA tested on the ancient remains of a man on Raithlin Island, located off the north-east coast of Antrim was shown to be DF21/Z30233. Z30233 is also about 4000 years old, so it must have separated from DF21 very soon after DF21 itself mutated. And the remains at Raithlin Island are also dated to be roughly 4000 years old. Could that man be an ancestor of the B and B1 groups? It's certainly possible. Where did he come from? On a clear day, the coast of Scotland may be visible from Raithlin Island. It would appear that an Isles origin is feasible for this haplogroup.

Now to the B2/Z253 group. Based on their haplotypes, it's likely there are two separate groups of them. We have one Big Y test from each. Z253 itself is estimated to be 3700 years old. The test from the larger group of men in this cluster is currently placed at the S15280 branch, which is about 2300 years old. The smaller group is at A503, which is upstream of S15280. A503 is estimated to be 2600 years old. Both groups need a second Big Y test to identify their own surname-specific branch further downstream. We are exploring recruiting for these additional Big Y tests.

Though the administrators of the Z253 haplogroup project make no effort to publicly identify where they might believe the haplogroup originated, with the preponderance of Irish and Scottish surnames found in it, it may also be of Isles origins.

An intriguing element to the history of the three Eoghanacht Raithlind/Mór-Ross groups is their likely origins prior to their presence in Munster. It would seem certain that they travelled a different route than the Irish Type II/ Eoghanacht Cashel. In each case, for all three groups, neighbouring branches on their respective haplotrees contain other surnames that are traditionally, and currently, located in the Roscommon/Galway/Connacht areas of the country. The unavoidable conclusion is that their Eoghanacht Raithlind ancestors occupied similar territories in the west at one point, probably well over a millenia ago, before migrating south. By now, none of the B1 and B2 groups have SNP matches living outside Munster, nor do any of their SNP neighbours have anyone living in Munster.

The B group has an opposite distinction. After the attainder of the Mór family and the loss of Ross Castle in the late 16th century, the chief left with a regiment of his men to join the wars against the English on the continent. Those that remained became rapparees in the Glen of the Flesk and were eventually banished to the Burren during the Tithe Wars. (See the *Captain Right – The Rightboy movement and the Tithe Wars* article in the January 2004 Journal of The O'Donoghue Society.) The B group are scattered from California to Australia, but their families all descend most recently from those rapparees from Clare. We are still looking for any relations left behind in Kerry.

The B1 group do have some relatively distant STR matches with other surnames of their SNP neighbours and a few more distant matches with unrelated surnames, but some of those tested are in different haplogroups altogether, suggesting mere convergence in some of their STR values – their modal haplotype is closer to the L21 modal (the ancestor of them all), which makes coincidental matching more likely.

It is significant that group B and B2 have virtually no matches with other surnames, even as low as 37 markers. Their genetic divergence from their SNP neighbours would indicate an early and singular descent from their common ancestor. Either through the group suffering a significant daughtering out along the way, the vagaries of war/famine, small families, lack of DNA testing of related individuals or a combination of all, only a small cluster of these lines have made it to the present day.

Did they travel down from Raithlin Island, either through the waterways and trails of the northern half of the island or perhaps sail south along the coast and at some point all the way to Munster? After all, they would have had to sail to reach the island to begin with! What made them do so? Wanderlust? Greener pastures? South Munster is certainly lusher lands than the rocky coast of the Burren… Is it a coincidence that the name of their tribe is the same as that island?

A skeptic might say it is no more than a coincidence that they all ended up within miles of each other in Kerry, particularly since the Raithlind's earliest territory was Cinel Laigharie in West Cork. But what are the odds? They invaded the Eoghanacht Loch Lein lands in retaliation for them siding with Thomond against Domnall MacDubhdaburren when he attacked the O'Briens after Clontarf. It appears they liked the territory and decided to stay, particularly since they had a falling out with the O Mahoneys after Clontarf as well. Did all their cohorts come along?

In the Milesian myths, while Eber took the south of the island, his brother Eremon sailed around the island and landed in the north, to take the northern half. Is there some ancient memory involved? I firmly believe the origin myths have some validity. While scholars took the stories literally in the 19th century, current thinking is that they are just stories. The truth probably lies in between, though piecing the puzzle together between myth, history and genetics is a challenge…but what fun!

Any thoughts? Post them on The Society Blog.

If anyone is interested in helping out with the project, please let me know.

Happy New Year!