

Case Study

Pinpointing the FLANAGAN

Genetic Homeland

www.irishorigenes.com



A handwritten signature in black ink, consisting of several loops and a long horizontal stroke.

Dr Tyrone Bowes
14th August 2012

INTRODUCTION

A commercial 37 marker Y chromosome DNA test will potentially provide one with the names of many hundreds of individuals with whom one shares a common male ancestor, but what often perplexes people is how one can match many individuals with different surnames? The answer is quite simple. Roughly 1,200 years ago one's direct medieval male ancestor, the first for example to call himself 'Flanagan' was living in close proximity to others with whom he was related but who assumed other surnames like Reaney, and Fitzgerald. Jump forward 1,200 years and there will be many descendants of those individual some of whom will today undergo ancestral DNA testing. Hence the surnames of one's medieval ancestor's neighbours are reflected in today's DNA test results.

However, sometimes the link between the surname and the Y chromosome is broken due to 'non-paternal events' (NPEs) like adoptions and infidelity. But since these events usually occur between Clans and families living in close proximity; these NPEs will still reflect one's ancestor's neighbours and shed light on where they lived. In Ireland surnames can still be found concentrated in the County from which they originate. In this manner one can examine the individual [surname distribution maps](#) on the Irish Origenes website for the surnames that reoccur as genetic matches from DNA testing and pinpoint a '**Genetic Homeland.**' The Genetic Homeland is the very small area, usually within a 5km (or 3 mile radius) where one's ancestors lived for hundreds if not thousands of years. It is the area where one's ancestors left their mark in the placenames of that area and in the DNA of its current inhabitants. Since modern science can pinpoint a Genetic Homeland it can also be used to confirm it by DNA testing individuals recruited from the identified area. This Case Study details how I used the test subject 'Flanagan's' Y-DNA results to pinpoint his Genetic Homeland. At the end of the report is a checklist on how to pinpoint your own Genetic Homeland.

Notes of caution!

1. In Ireland each of the estimated 1,500 distinct Clans have a single founding ancestor, that's an estimated 1,500 Adam's from whom one can trace direct ancestry. But science has demonstrated that only 50% of individuals with a particular Irish surname will be related to the surnames founding ancestor (a surname 'Adam'), the other 50% of people will have an association that has arisen due to NPEs, usually the result of adoptions or infidelity.
2. Often people are looking for their DNA results to trace back to a specific area. One must remember that the DNA results reflect one's ancestor's neighbours from around 1,200 years ago. As a result if your recent Irish ancestors were originally 9th Century Viking raiders, 11th Century conquering Normans, or 16th Century Planters, your DNA results will reflect earlier English, Scottish, Welsh, and possibly Scandinavian origin. I have estimated that only 60% of those with Irish ancestry are related to the pre-Christian Celtic tribes of Ireland. One must approach this process with an open mind!

Pinpointing the GENETIC HOMELAND

To identify one's Genetic Homeland one must first find the surnames that continually appear as genetic matches. These reoccurring surnames reflect one's ancestor's neighbours from the time when surnames became common. Results for test subject Flanagan are shown in **Table 1**.

SURNAMES THAT REOCCUR AS A GENETIC MATCH FOR TEST SUBJECT FLANAGAN FROM Y- DNA37 TESTING

Test subject	37 Marker Y-DNA test				
	37 marker level				
	exact	-1	-2	-3	-4
Flanagan	Reaney(x2)	-	Fitzgerald(x2)	-	-

Table 1: Reoccurring surname matches for Flanagan. Each Surname appears at the earliest point at which it occurs as a DNA match, for example the first match with a Reaney occurs at 37 of 37 markers but not all Reaney's will match at this level. In brackets are the numbers of individuals that occur as a match. Coloured font indicates ethnicity; **Irish, Norman**.

Upon DNA testing Mr Flanagan did not match other Flanagan's and this implies that his association with the 'Flanagan' surname is a result of a non-paternal event (NPE) which has occurred at some point his paternal ancestry. Although there are only 2 reoccurring surname matches; to Fitzgerald's and Reaney's, these together with Flanagan exhibit a common area of association, see **Figure 1**. What is particularly interesting is that in Ireland the surname Reaney is associated with a single geographical area, this in contrast to Flanagan which is found in multiple locations representing a number of Irish Clans that used this surname, and to Fitzgerald who's scattered distribution reflects were these Normans settled.

The surnames of Ireland map shows where farmers (farmland like the surname and Y chromosome are typically passed from father to son) with a particular surname cluster in 1911. When one places pins on this map where the surnames present in Table 1 are located, the association with Roscommon and Mayo is evident, see **Figure 2**. What is also apparent from this area of the map is the mix of both Norman and Irish surnames, which is similarly reflected in Mr Flanagan's DNA matches. However the location of the Flanagan, Fitzgerald, and Reaney surnames appear relatively distant to one another and a closer examination of farmers (heads of household) with these surnames and where they farmed in 1911 is required to determine if all 3 farming communities lived in close proximity.

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WHERE DO THE FLANAGAN, REANEY, AND FITZGERALD SURNAMES ORIGINATE?

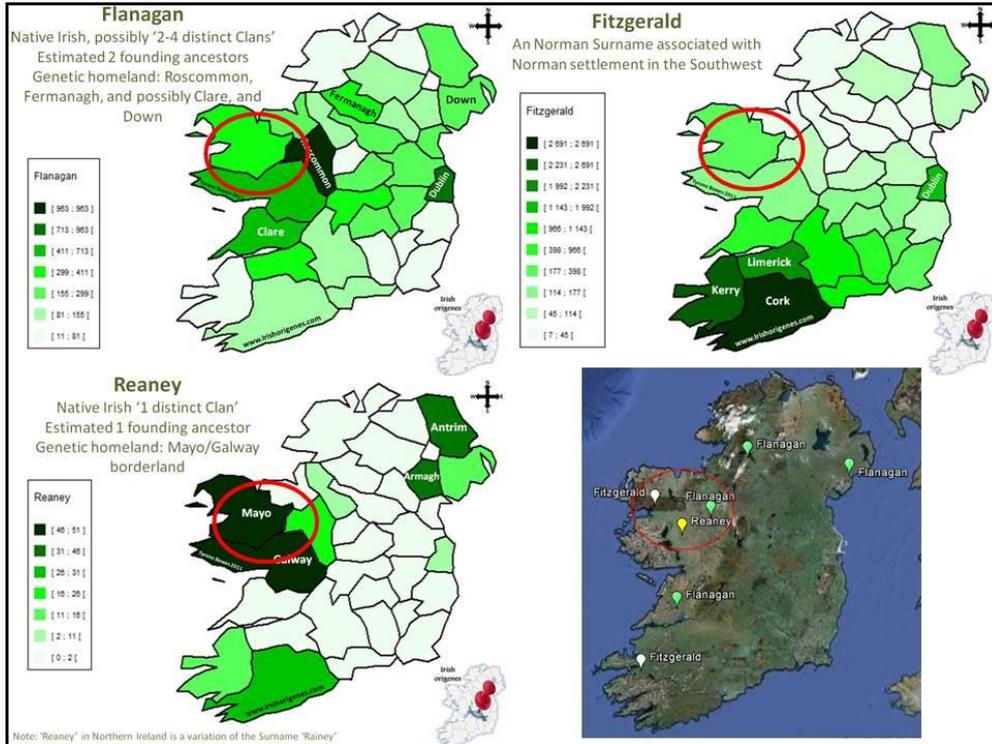


Figure 1: Surname distribution maps for Mr Flanagan's genetic matches show a common area of association. The surnames Flanagan, Reaney, and Fitzgerald are all associated with the west of Ireland (red circle). Reaney is unique as it is associated with a single geographical area on the border of Galway and Mayo. The Google earth image (bottom right) shows the proximity of these 3 farming communities, white pins; Fitzgerald's, yellow pin; Reaney's, Green pins; Flanagan's.



Figure 2: The Irish Origenes Surnames of Ireland map showing where Farmers associated with each surname cluster in 1911. Flanagan is associated with Roscommon, while Reaney and Fitzgerald are associated with neighbouring Mayo. The presence of large numbers of Norman surnames (red font) arose from the Norman invasion of Connaught that began in 1175AD.

Flanagan - A Case Study

By placing pins in the townlands within Counties Galway, Roscommon, and Mayo where farmers with the surnames Flanagan, Fitzgerald, and Reaney were found in 1911, an area where all 3 farming communities cluster together is revealed, see **Figure 3**. These communities overlapped in the southern corner of the Mayo/Roscommon border, it is here that Mr Flanagan's direct male ancestors lived and it is here that his Genetic Homeland is situated.

Evidence of Mr Flanagan's genetic relative's long association with this area is reflected in the presence of a castle built by the Fitzgerald's on the bank of Loughglynn, see **Figure 4**. One also finds a Crockaunrannell or 'Reginald's little hill' which may be a reference to the Reaney surname (which is believed to be derived from the Viking surname Ragnall).

An examination of Mr Flanagan's Genetic Homeland as it appears on the Medieval Clan Territories of Ireland map, shows that it is situated where the old Gaelic and Norman worlds collided, see **Figure 5**. It should come as no surprise that Mr Flanagan's surname matches are of both Gael and Norman origin given their close existence in that area for over 800 years.

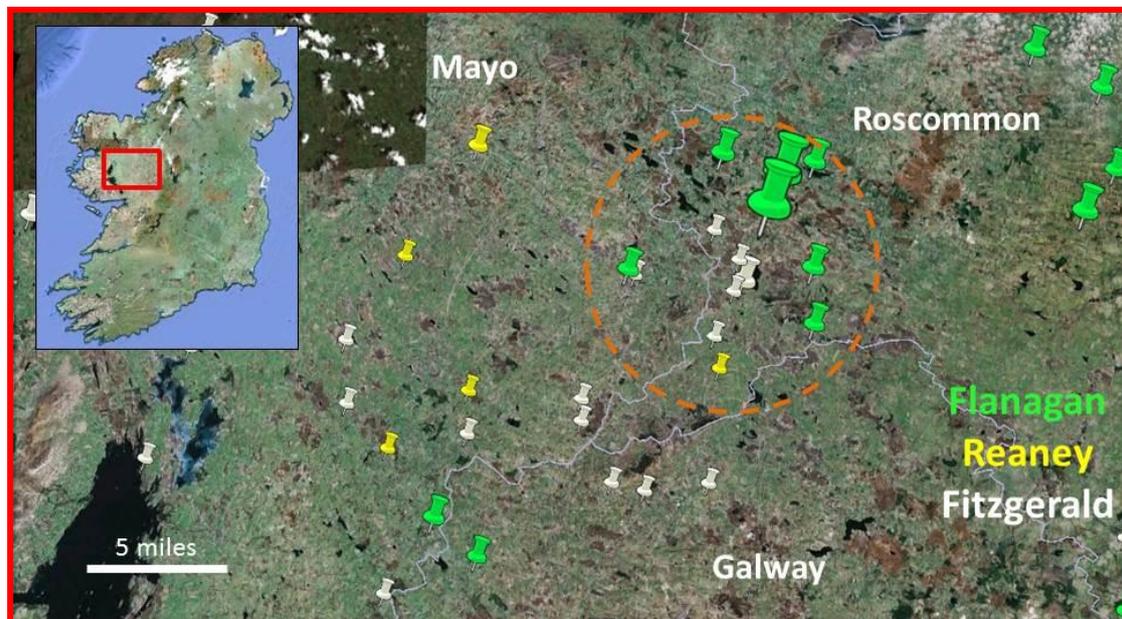


Figure 3: The Flanagan, Reaney, and Fitzgerald farming communities overlap in their distribution on the Mayo/Roscommon border. When one places pins on the townlands where farmers with each surname are found in 1911 one observes a common area of association (orange broken circle) it is here that these 3 farming communities lived in close proximity. Green pins; Flanagan farmers, white pins; Fitzgerald farmers, yellow pins; Reaney farmers.

Flanagan - A Case Study

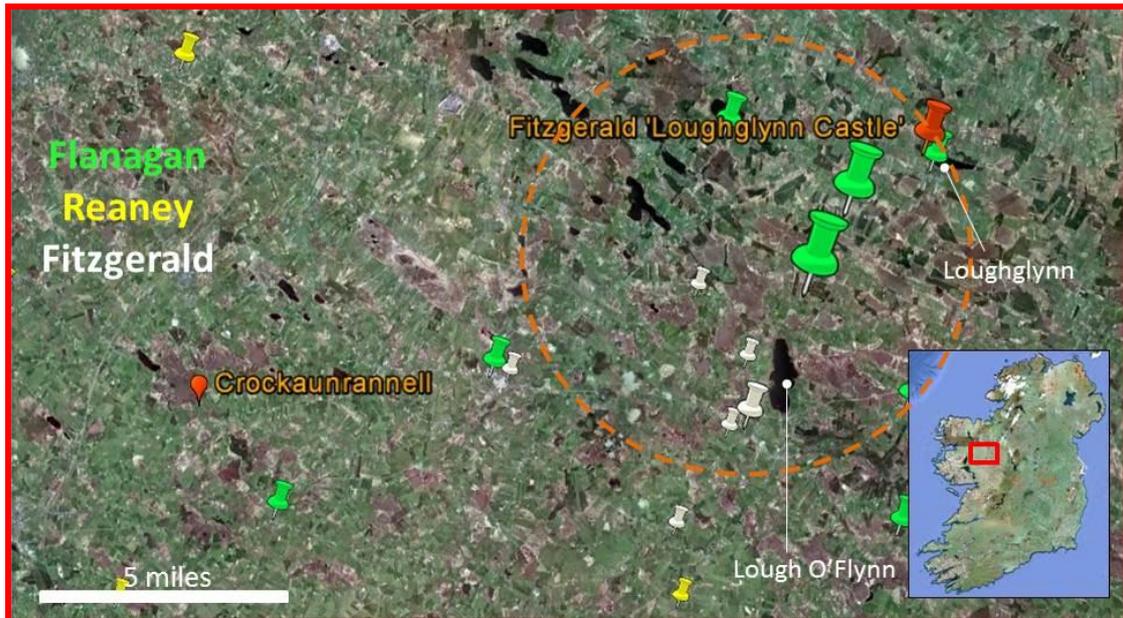


Figure 4: Mr Flanagan's Genetic Homeland (orange broken circle) centred upon Lough Flynn in County Roscommon. The Flanagan, Reaney, and Fitzgerald farming communities are found clustered around Lough Flynn, close to this area is Loughglynn Castle built by the Fitzgerald's. To the west in Mayo one finds Crockaunrannell (Rannell/Reaney's little hill).

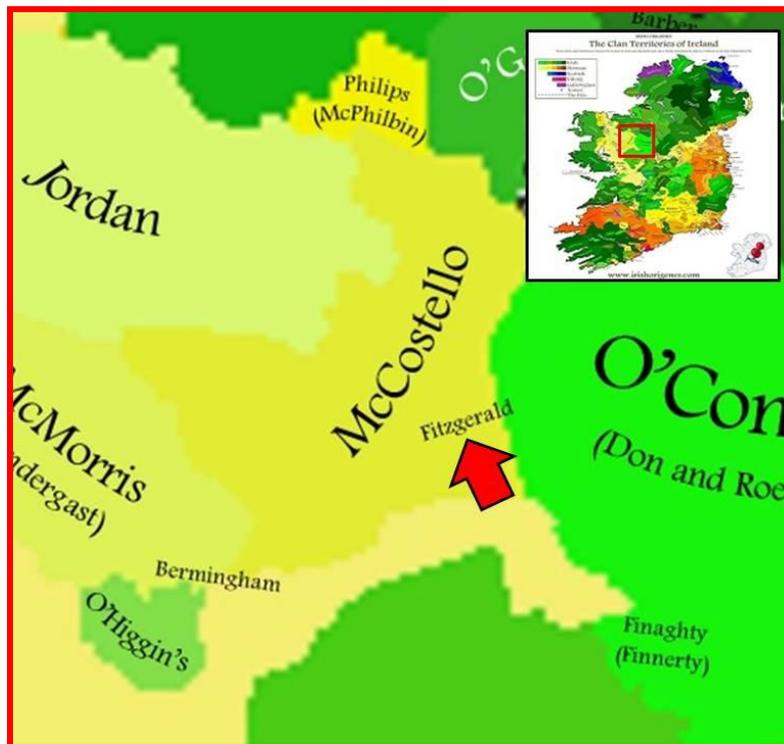


Figure 5: The Medieval Clan territories of Ireland. Mr Flanagan's Genetic Homeland is situated where the old world of the Gaelic Irish met the new world of the Normans. The Norman-Fitzgerald's (red arrow) were one of the prominent Norman families in the area at this time.

Viking Ancestry?

Mr Flanagan's DNA matches point to a direct male ancestor living in the area surrounding Lough O'Flynn. However in the absence of surname matches to other Irish or Norman surnames it would appear that Mr Flanagan's paternal ancestors were neither native Gaels nor conquering Normans.

The Reaney's, as Mr Flanagan's closest reoccurring genetic match, are most likely the origin of the NPE in Mr Flanagan's paternal ancestry. Having ruled out Gael and Norman, the Reaney surname may also hold the answer to Mr Flanagan's ancestral origins. Reaney is believed to be derived from Reginald (MacLysaght's; The Surnames of Ireland) which is in turn an anglicisation of the Viking personal name Ragnall. The Reaney's may therefore be of Viking stock! This Viking-associated surname, the Viking-associated placename (Croccaunrannell), and a Haplogroup (R1a1a) more frequently found in Scandinavia could be strong indications of Mr Flanagan's Viking ancestry. There are other Viking surnames associated with the area surrounding Mr Flanagan's Genetic Homeland, most notable is the surname Doyle which is the most common Viking surname found in Ireland (see Figure 2).

How to confirm a pinpointed 'Genetic Homeland'

To confirm the Reaney's as the origin of the NPE in Mr Flanagan's paternal ancestry will require the recruitment for commercial ancestral DNA testing of Reaney's that still farm the lands of their ancestors in County Mayo and Roscommon. Mr Flanagan's Viking ancestry will be confirmed as more people with Scandinavian ancestry participate in Family Tree Y-DNA testing, if Mr Flanagan's ancestors were of Viking stock then some of these individuals will appear as genetic matches at the 25 or 12 marker level. At present there is a single individual from Scandinavia that occurs as a genetic match at the 12 marker level.

CHECK LIST FOR DISCOVERING YOUR OWN GENETIC HOMELAND

1. First you must order a Y-DNA37 test from Family Tree DNA. To order follow the 'are you a warrior' link from the [Irish Origenes](#) homepage.
2. [Irish Origenes Surnames database](#)
3. [Irish Origenes Surnames map](#) Stick a pin on your Surname and on the Surnames of your genetic matches (as revealed by DNA testing) to discover your Genetic Homeland.
4. Google Earth.
5. [Irish Origenes Clan Territories Map](#). This map details the territories of over 400 of the most prominent Irish Clans and Norman families and is based on the location of nearly 1,500 castles and their known historical association to these Clans/Families.
6. [Irish Origenes Castles of Ireland Map](#). This map details the names and precise location of nearly 1,500 castles in Ireland. Input the co-ordinates into Google Earth and view the castles on street view.
7. Your Genetic Homeland can be confirmed by recruiting male volunteers with the Surname of interest from the identified area for Y-DNA37 testing.

ALTERNATIVELY ORDER YOUR OWN CASE STUDY BY CONTACTING ME DIRECTLY tyronebowes@gmail.com

The consultation for your own Case Study is free. At present there is an 86% success rate. If in the unlikely event that I cannot pinpoint your Genetic Homeland I will explain why and I will not charge you.

Every successful Case Study customer also receives an Irish Origenes Surnames of Ireland, Clan territories of Ireland, and the Castles of Ireland map.