

# **Case Study**

## **Pinpointing the Fitzsimmons**

### **Genetic Homeland**

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[www.irishorigenes.com](http://www.irishorigenes.com)



A stylized, handwritten signature in black ink.

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### 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 'Fitzsimmons' was living in close proximity to others with whom he was related but who assumed other surnames like O'Reilly and McDermott. Given that 1,200 years have passed since surnames were adopted, there will be many descendants of these individuals some of whom will today undergo commercial ancestral Y-DNA testing. Hence the surnames of one's medieval ancestor's neighbours will be reflected in today's commercial ancestral DNA test result.

Surnames in Ireland 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](http://www.irishorigenes.com) website and pinpoint a '**Genetic Homeland.**' The Genetic Homeland is the very small area (within a 5 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 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 from the pinpointed area. The Case Study will detail how I made sense of the test subject 'Fitzsimmons' Y-DNA results and at the end detail a checklist outlining how you can do the same.

#### 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, the other 50% of people will have an association that has arisen as a result of what are called 'non-paternal events,' usually a 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 results reflect one's ancestor's neighbours from around 1,200 years ago. As a result if your recent Irish ancestors were originally 9<sup>th</sup> Century Viking raiders, 12<sup>th</sup> Century conquering Normans, or 16<sup>th</sup> 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

Upon commercial ancestral Y-DNA testing Mr Fitzsimmons matched a single individual called Fitzsimmons, who tested independently, see **Figure 1**. This genetic match to another Fitzsimmons means that the test subject may be directly related to a 'Fitzsimmons Adam' or that his association with this notable Norman surname is potentially very old. Mr Fitzsimmons's other reoccurring genetic surname matches as a snapshot of his medieval ancestors neighbours should reveal where the Fitzsimmons 'Adam' lived or the area where this surname was acquired by his paternal ancestor.

### SURNAMES THAT REOCCUR AS A GENETIC MATCH TO TEST SUBJECT FITZSIMMONS FROM COMMERCIAL ANCESTRAL Y-DNA TESTING

Test subject	Ancestry.com /MRCA estimation						
	1	2	3	6	7	8	9
Fitzsimmons	Mathew/Mathew(x2)	McDonald/McDonald(x3)	Fitzsimmons(x1)	McPartland(x2)	Clark(x4)	Simth(x5)	Reilly(x14) McDermott(x2) Collins(x4) Bingham(x2)

**Figure 1:** Reoccurring surname matches for test subject Fitzsimmons as revealed by commercial ancestral Y-DNA testing. Surnames are listed at the point where they first appear as a genetic match. Mr Fitzsimmons's most frequent reoccurring genetic matches are to surnames associated with Ireland. Font colour is indicative of ethnicity; Irish, Scottish, Norman, black font indicates surnames associated with multiple ethnicities. Numbers in brackets are the number of different individuals with each surname that occur as a genetic match.

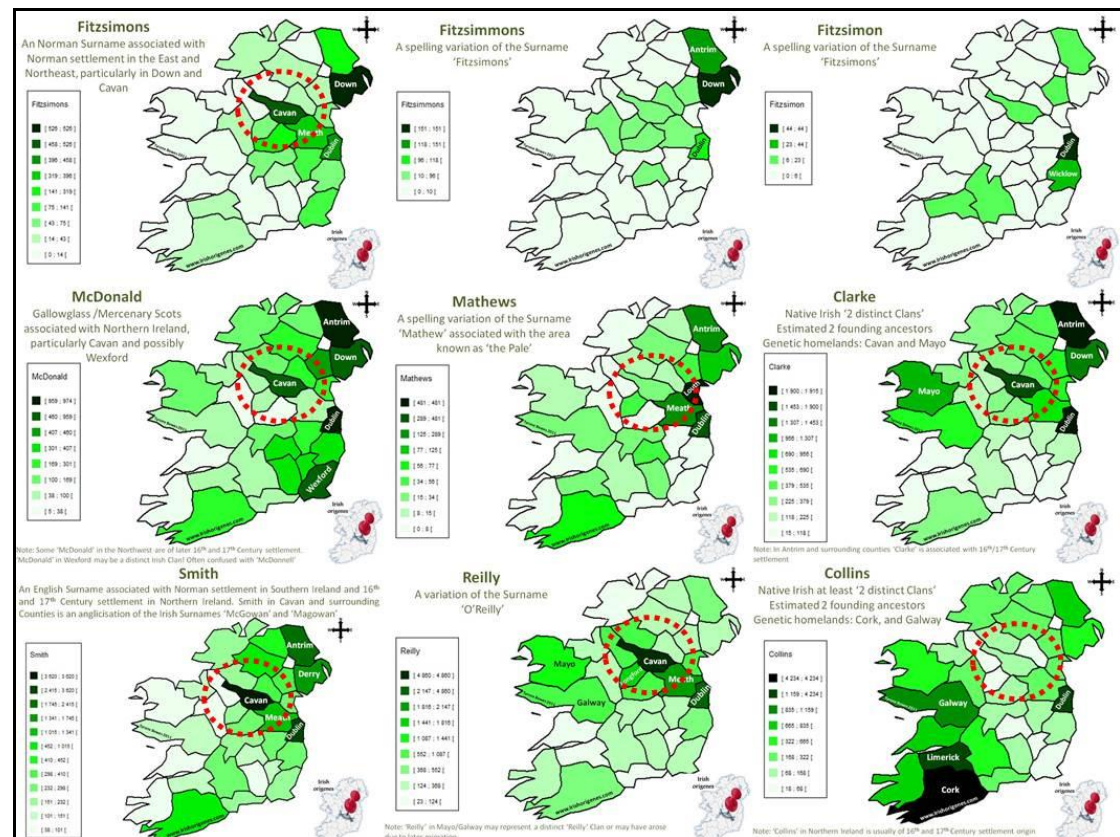
An examination of the reoccurring surnames identified in Figure 1 revealed an ancestral link to Ireland as evident by genetic matches to surnames that arose in Ireland like Reilly, and McDermott, those associated with Norman settlement including Fitzsimmons and Mathew, or those associated with medieval mercenary Scottish settlement like MacDonald, see **Figure 1**.

Fitzsimons (from French 'fils' son of) is a notable Norman surname that arrived in Ireland in 1169AD. Surname distribution mapping reveals that the Fitzsimmons surname is predominantly associated with Counties Cavan and Down, see **Figure 2**. The reoccurring genetic matches as a snapshot of the test subjects medieval neighbours should reveal where his Fitzsimons ancestor lived, when one examines the surname distribution pattern for these surnames throughout the 32 Counties of Ireland in 1911, an association amongst all of these surnames with County Cavan is particularly evident, see **Figure 2**.

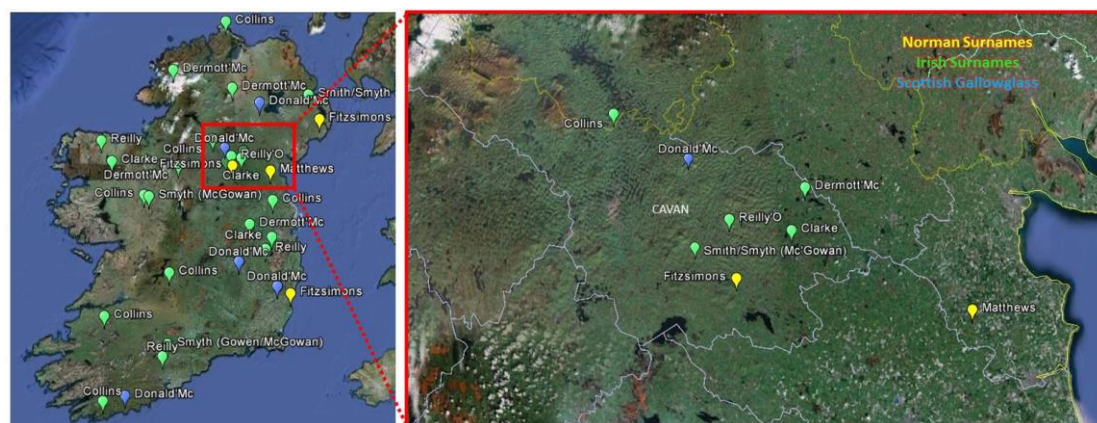
Land, like the surname and Y chromosome is typically passed from father to son. Given the importance of land to the Irish psyche and the fact that Ireland was still an overwhelmingly agrarian society in 1911, farmers in Ireland could still be found farming the same land that their ancestors had settled hundreds if not thousands of years ago. To identify the area where the test subject Fitzsimmons ancestors settled one must plot where the Farmers (heads of household) with the surnames identified in Figure 1 cluster from census data. This process reveals 3 distinct Fitzsimons farming clusters within in Ireland; located in Wexford (the entry point for the Normans in Ireland), Cavan, and Down, see **Figure 3**. Although Mr Fitzsimmons matches common surnames found in Ireland, the only area where the Fitzsimmons,

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McDonald, Clarke, Smith, Collins, and Reilly farming communities are found in close proximity within County Cavan, see **Figure 3**. A cluster of Mathews farmers is found close-by in neighbouring Louth.



**Figure 2:** Surname distribution mapping reveals a paternal ancestral link to County Cavan. The reoccurring surnames as revealed by Y-DNA testing all are associated with Cavan (red broken circle) or a bordering County.



**Figure 3:** The farming communities associated with Mr Fitzsimmons genetic matches cluster in County Cavan. Although the surnames that reoccur as genetic matches to Mr Fitzsimmons are associated with multiple locations, these farming communities are only found together in close proximity within County Cavan (red box magnified). Balloon colour is indicative of the ethnicity associated with each surname; Irish, Norman, and Scottish Gallowglass.



An examination of the Irish Origenes Clan Territories of Ireland Map typically reveals the test subjects shared ancestry to at least one of the prominent Clans or Families that once ruled over one's Genetic Homeland. An examination of County Cavan on this map reveals that the area where today's 'Cavan' Fitzsimmons cluster was located in the medieval territory of the O'Reilly's, see **Figure 4**. The O'Reilly's were a notable Gaelic Irish Clan who's territory bordered the lands of prominent Norman families, this close proximity between Gael and Gall (Normans) explains the mix of Norman and Gaelic Irish surnames in Mr Fitzsimmons DNA results. These notable Norman and Irish families both employed mercenary Scots known as Gallowglass which also explains the genetic matches to Scottish-McDonald's.

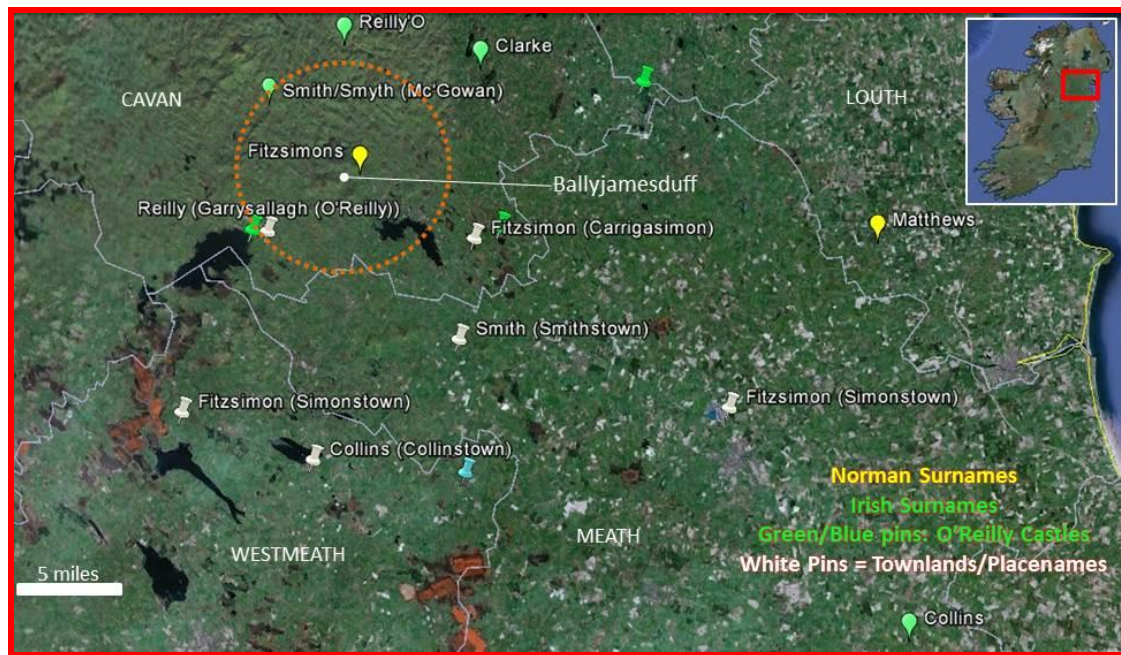


**Figure 4:** The Clan Territories of Ireland. Mr Fitzsimmons ancestors lived in an area dominated by the O'Reilly's who appear as his most frequent and prominent genetic match (**red arrow**). This area was the borderland between Gael and Gall (foreigners/Normans) which accounts for the genetic matches to both Norman and Gaelic Irish surnames.

### The Fitzsimmons Genetic Homeland

Ireland is unique in that many of its placenames reflect the Clans and families that arose or settled there. The 'townland' is the smallest unit of geographical land division in Ireland. The entire country is divided into an estimated 62,000 ancient townlands whose names often *predate* the arrival of the Normans in Ireland in 1169AD. Mr Fitzsimmons Genetic Homeland is centred upon the town of Ballyjamesduff (the highest concentration of Fitzsimmons farmers cluster in the surrounding Countryside In 1911), see **Figure 5**. It is here that Mr Fitzsimmon's ancestors lived surrounded by Clans and families that appear as genetic matches. It is also here that one finds a number placenames that refer to the Fitzsimmons including Carrigasimon (Fitzsimmons/Simons rock) in Cavan, and Simonstown found in both Meath and Westmeath. There is also a Smithstown, Collinstown, and numerous O'Reilly Castles in the surrounding area, see **Figure 5**.

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**Figure 5:** Mr Fitzsimmons's Genetic Homeland. Mr Fitzsimmons's Genetic Homeland is centred upon the village of Ballyjamesduff (orange broken circle). In the surrounding area one finds farming communities that bear surnames that appear as genetic matches. There are also placenames associated with the Fitzsimmons including Carrigasimon and Simonstown (in Meath and Westmeath), castles associated with his genetic relatives the O'Reilly, and placenames that also refer to his genetic relatives including Smithstown and Collinstown.

### Gael or Gall (Norman)?

For the Gaelic Irish farmers Norman Conquest often simply involved exchanging a Gaelic Irish chieftain for a new Norman lord, which based on DNA evidence was sometimes accompanied by these farmers adopting the surname of their new lord. The DNA results do indicate that this may have happened in Mr Fitzsimmons paternal ancestry. Mr Fitzsimmons most frequent re-occurring genetic matches are to Irish-O'Reilly's which may suggest that Mr Fitzsimmons paternal ancestors were originally Gaelic Irish, possibly 'O'Reilly's,' or possibly a member of one of the Clans who were related to the O'Reilly's and resided in that area. The answer to the Gael or Gall question may be revealed through further commercial DNA testing.

### How to confirm a pinpointed 'Genetic Homeland'

Confirmation of the area surrounding Ballyjamesduff as Mr Fitzsimmons's Genetic Homeland will require the recruitment of 'Fitzsimmons' farmers currently living and farming in that area for commercial ancestral Y-DNA testing.

## CHECK LIST FOR DISCOVERING YOUR OWN GENETIC HOMELAND

1. First you must order a Y-DNA test.
2. [Irish Origenes Surnames database](#)

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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](mailto: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.***