

Case Study

Pinpointing the KIRK

Genetic Homeland

www.irishorigenes.com



A handwritten signature in black ink, appearing to read 'Dr Tyrone Bowes'. The signature is stylized and cursive.

Dr Tyrone Bowes
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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 'MacKnagh' was living in close proximity to others with whom he was related but who assumed other surnames like O'Kane and McAnally. 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.

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 Y-DNA testing and pinpoint a '**Genetic Homeland.**' The Genetic Homeland is the very small area, usually within a 5km 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.

Notes of caution!

1. In Ireland each of the estimated 1,500 distinct Clans had 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 non-paternal events (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 Kirk are shown in **Table 1**.

SURNAMES THAT REOCCUR AS A GENETIC MATCH FOR TEST SUBJECT KIRK FROM Y- DNA67 TESTING

Test subject	67 marker level					
	exact	-1	-2	-3	-4	-5
Kirk	-	-	-	McKenna(x3)	O'Kane(x8) Phillips(x6) Young(x5)	McConnell(x4) Graham(x3) Carnes(x3) Byrne(x12) McAnally/McAnnally(x7)

Table 1: Reoccurring surname matches for test subject Kirk. Each Surname appears at the earliest point at which it occurs as a DNA match, for example the first match with a McKenna occurs at 64 of 67 markers but not all McKenna's will match at this level. In brackets are the numbers of individuals that occur as a match. Coloured font indicates ethnicity; **Irish**, **English/Norman**, **Scottish (16th Century plantation origin)**.

Mr Kirk's paternal ancestry is clearly associated with Ireland as reflected by his closest most frequent reoccurring surname matches to notable Irish surnames, see **Table 1**. In Ireland the surname Kirk can be of Scottish 16th Century plantation origin or simply an Anglicisation of the Irish surnames McGurk (in Northern Ireland) and Quirke/Quirk (in Southern Ireland). However the lack of genetic matches to other Kirk's indicates that Mr Kirk's ancestral association with the Kirk surname has arisen as a result of a non-paternal event at some point in his paternal ancestry. Even so, his reoccurring Irish surname matches (as identified in Table 1) which are a snapshot of his ancestor's medieval neighbours, should originate in a common area and hence reveal where his paternal ancestors originate. They may even shed light on how his paternal ancestors acquired the Kirk surname.

When one examines the Irish Origenes surname distribution maps for the Irish and Norman surnames identified in Table 1, they all appear to be associated with the north of the Island, see **Figure 1**. Among Mr Kirk's genetic matches the reoccurring surname matches to O'Kane are particularly notable, as this surname is associated with a single geographical location situated within County Derry. The O'Kane surname can only have arisen within County Derry and an association with this County is supported by the fact that his closest reoccurring surname matches to McKenna, Phillip's, Young, McConnell, Byrne, and McAnally, although more frequent in their distribution, are found associated with Counties that border Derry.

WHERE DO MR KIRK'S REOCCURRING SURNAMES MATCHES ORIGINATE?

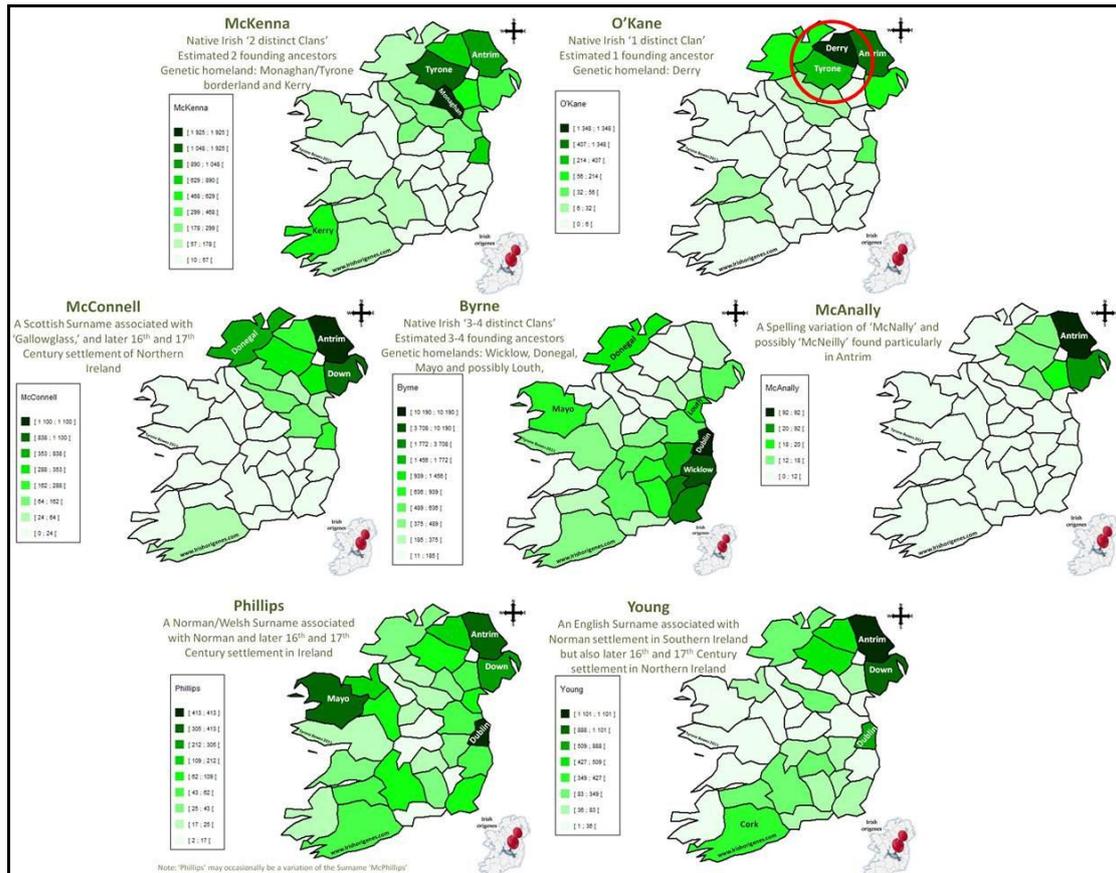


Figure 1: Surname distribution maps for Mr Kirk's genetic matches reveal a common area of association. The closest Irish and Norman reoccurring surnames identified from Y-DNA 67 testing are all associated with Northern Ireland. The O'Kane surname is especially notable as it occurs frequently as a match and is found associated exclusively with a single geographical location within County Londonderry (red circle). The McKenna, McConnell, Byrne, McAnally, Phillip's, and Young surnames are associated with Counties that border County Derry.

In 1911 (when a complete census of the Country was performed) each Irish surname could still be found concentrated in the area where it had first appeared, or in the Case of Norman surnames in the areas where they had settled. Since farmers have the greatest link to the land, and since land like the surname and Y chromosome are passed from father to son, one can examine where in 1911 the farming communities associated with each Irish and Norman surname as revealed by Mr Kirk commercial ancestral Y-DNA testing were found, and see a link to a specific geographical area emerge. In Mr Kirk's case this analytical process reveals a striking association with County Derry, see **Figure 2**.

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Figure 2: The farming communities associated with Mr Kirk's closest reoccurring surname matches cluster to the northeast of Lough Neagh. Mr Kirk's closest matches are to the Irish Mckenna's. The Derry-McKenna farming community is literally surrounded by Mr Kirk's other reoccurring surname matches, which includes the Scottish McConnell's, Irish O'Kane's and McAnally's, and the Norman Young's and Phillip's.

The O'Cahan

The Irish Origenes Clan Territories of Ireland map was reconstructed based on the location of castles/towerhouses and their known historical association to a particular Clan or Family. Over 400 of the most prominent Irish, Norman, Scottish, and Viking Clans and Families feature on this map. What is remarkable is that if you have Irish ancestry then the results of your ancestral DNA test will reveal an ancestral link to one or more of these prominent Clans or families. Mr Kirk is a close genetic match to the O'Kane's (O'Cahan) who feature prominently on the Irish Origenes Clan map and who controlled most of modern County Derry, see **Figure 3**. To the east of the O'Kane territory one find the Scottish Clans who settled permanently in Antrim and who served as mercenaries to Irish Chiefs, Norman lords, and even the English authorities for over 400 years. To the southeast one finds the remnants of the Normans who had originally conquered most of Ulster but by the 15th Century were limited to the area Carrickfergus. This proximity to Scottish Clans and Norman settlers is reflected in Mr Kirk's Y-DNA results. His matches to people with surnames like Young, Phillip, and McConnell are representative of non-paternal events between the Gaels (native Irish) and these settlers. This would similarly explain his matches to surnames like Graham and Carnes which are overwhelmingly associated with the later 16th Century settlement of Ulster by predominantly lowlander Scots.

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their names to Clans that appear as genetic matches to Mr Kirk including Tirkane (Kane's land) and Bracaghreilly (O'Reilly's speckled land), see **Figure 4**.

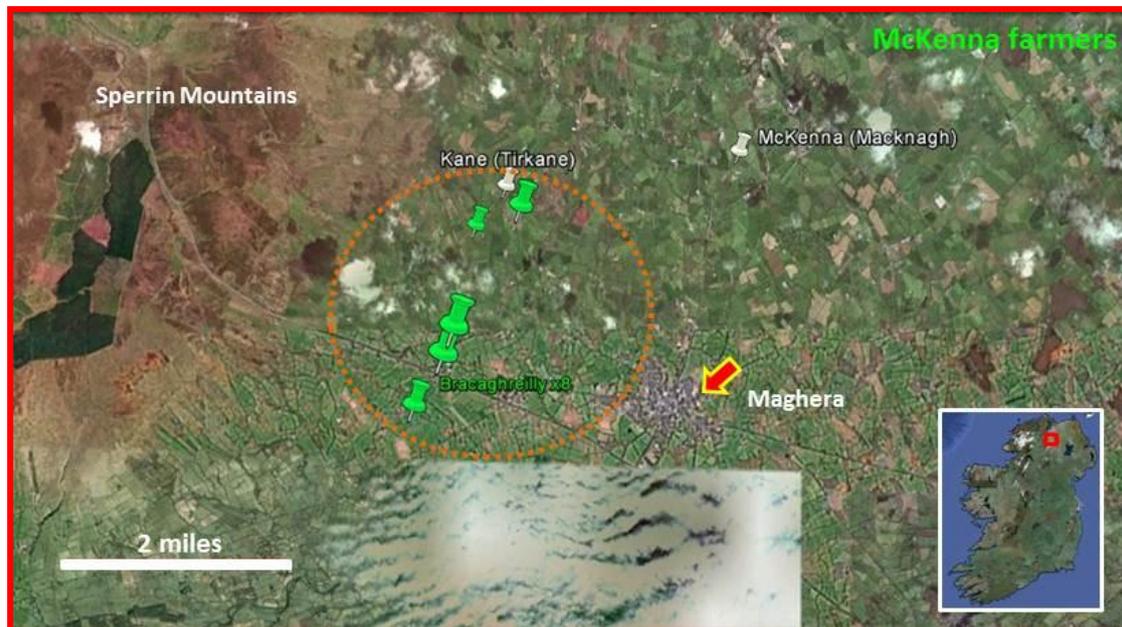


Figure 4: Mr Kirk's Genetic Homeland. Mr Kirk's Genetic Homeland lies in the farmland between the Sperrin mountains and the town of Maghera (**orange broken circle**). It is within this area that 43 McKenna farmers (heads of household, **green pins**) could be found in 1911. Within Mr Kirk's Genetic Homeland one also finds placenames in the Townlands like Tirkane (O'Kane's land) and Bracaghreilly (O'Reilly's speckled land) which are surnames that frequently reoccur as genetic matches to Mr Kirk and reflect his direct medieval ancestors neighbours.

The Derry McKenna's, MacKnagh's in disguise?

The Derry McKenna farming community clusters within a very small area which could suggest that they are distinct from the more common McKenna's found to the south in County Monaghan. This distinctness is supported by the fact that Mr Kirk matches only 3 McKenna's from a total of 41 who have joined the McKenna DNA group. In addition, close to Mr Kirk's Genetic Homeland one finds a townland called 'MacKnagh, see **Figure 4**. There are no people in the 1911 census that use the surname MacKnagh and there are no surnames in the surrounding area (beside 'McKenna') that sound anything like MacKnagh (the 'gh' at the end of this surname is silent). A more likely explanation is that this surname has simply been anglicised to the more common McKenna, much like O'Cahan over time has become O'Kane or simply Kane. If this is true then the MacKnagh Townland found just North of the town of Maghera would mark the precise origin of the Derry McKenna's.

So how did Mr Kirk end up with his surname? Interestingly the McGurk's (anglicised Kirk) were neighbours of the Derry MacKnagh's occupying an area close to the southern edge of the Sperrin Mountains in County Tyrone, see **Figure 5**.



Figure 5: The neighbouring Clans of McKenna and McGurk. Each pin has been placed where farmers (heads of household) with each surname cluster in 1911. Both surnames have been extensively anglicised; McGurk to Kirk, and MacKnagh to McKenna. Their proximity to one another has resulted in the non-paternal event which has occurred at some point in Mr Kirk's paternal ancestry and resulted in the acquisition of the Kirk surname.

How to confirm a pinpointed 'Genetic Homeland'

Mr Kirk's Genetic Homeland can be established by recruiting McKenna's (preferably Farmers) from the area around Maghera for Y-DNA37 testing.

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.

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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.