

Case Study

Pinpointing the KIELY Genetic Homeland

www.irishorigenes.com



A handwritten signature in black ink, appearing to read 'Tyrone Bowes'.

Dr Tyrone Bowes
6th July 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 ancestry, 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 'Kiely' was living in close proximity to others with whom he was related but who assumed other Surnames like Davis, Doughty, and Davenport. Given that 1,200 years have passed since Surnames were adopted, there will be many descendants of these individuals some of whom today will undergo DNA testing. Hence the Surnames of one's medieval ancestor's neighbours will be 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](#) 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 from the pinpointed area. This Case Study details how I used the test subject 'Kiely's' Y-DNA results to pinpoint his 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, 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 ancestor was originally a 9th Century Viking raider, 12th Century conquering Norman, or a 16th Century Planter, 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 are less likely to be a result of non-paternal events (adoptions/infidelity) and reflect the surname of a medieval ancestors neighbour. Results for test subject ‘Kiely’ are shown in **Table 1**.

SURNAMES THAT REOCCUR AS A GENETIC MATCH TO TEST SUBJECT KIELY FROM 37 MARKER Y-CHROMOSOME DNA TESTING

Test subject	37 Marker Y-DNA test								
	37 marker level					25 Marker level			
	exact	-1	-2	-3	-4	exact	-1	-2	
Kiely			Kiely(x3)	Davis(x5)	Rickenbaker(x2)1 Gray(x2) Flannery/Flanery (x9)	Walker (x2)		Doty(x48) Dowty(x2) Doughty(x7) Baldwin(x2?) Smith(x2) Doten(x2) Davenport (x20)	Graham(x3) Lantz(x3)2 Donahoe(x2) Franklin (x15) Bryant(x2) Berry(x2)2 Ridley(x2) McConnell(x2) Beatty(x3) Bond(x2) Taylor(x2) Thomas(x3) Newton (x3) Wright(x2) Clements(x2) Dalton(x4) Stevens(x3) Farris(x2) MacGregor(x5) Calkins(x2) Nicholson(x6) Forbes(x2) Jones(x2) Shirk(x2) Hankins(x2) Slaughter(x2) Boaz(x2) Conroe(x2) Hodnett(x3) Sherrick/Sherick(x2) Doten(x2)

Table 1: Reoccurring surname matches for test subject Kiely. Surnames appear at the point at which they first occur as a genetic match e.g. the first match to another individual called Kiely occurs at 35/37 markers, but not all Kiely’s will match at this level. Figures in brackets represent the number of individuals with a particular surname who occur as a genetic match. Coloured font denotes the ethnicity associated with each surname; Irish, English, surnames in black font may be of multiple ethnic origins. ^{1/2}These matches represent individuals from the same family undergoing DNA testing.

Firstly the test subject’s closest genetic matches are to other individuals called Kiely. This would indicate that the test subject is part of the 50% of individuals who after an estimated 1,000 years have retained the surname of their founding ancestor, the first to call themselves Kiely (the Kiely Adam so to speak). The other closest and most numerous genetic matches are to individuals called Davis and Flannery both of which are associated with Ireland. However although Flannery is of notable Irish (ancient Gaelic) origin, Davis is associated with both Welsh and English origin and arrived in Ireland after 1169AD with the Normans. Matters are further complicated when one examines surname distribution maps for Kiely, Davis, and Flannery throughout the 32 Counties of Ireland as there is no overlap in their distribution, see **Figure 1**. If Mr Kiely’s ancestors were in Ireland prior to 1169AD one would typically see these surnames concentrating in the same County. This implies that Mr Kiely’s ancestors are more recent arrivals in Ireland and given the link with Davis this would imply that Mr Kiely’s ancestors arrived with the Normans in 1169 AD. This is supported by the

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finding that the Kiely, Davis, and Flannery farming communities are all associated with the areas of Norman settlement as illustrated in **Figure 2**.

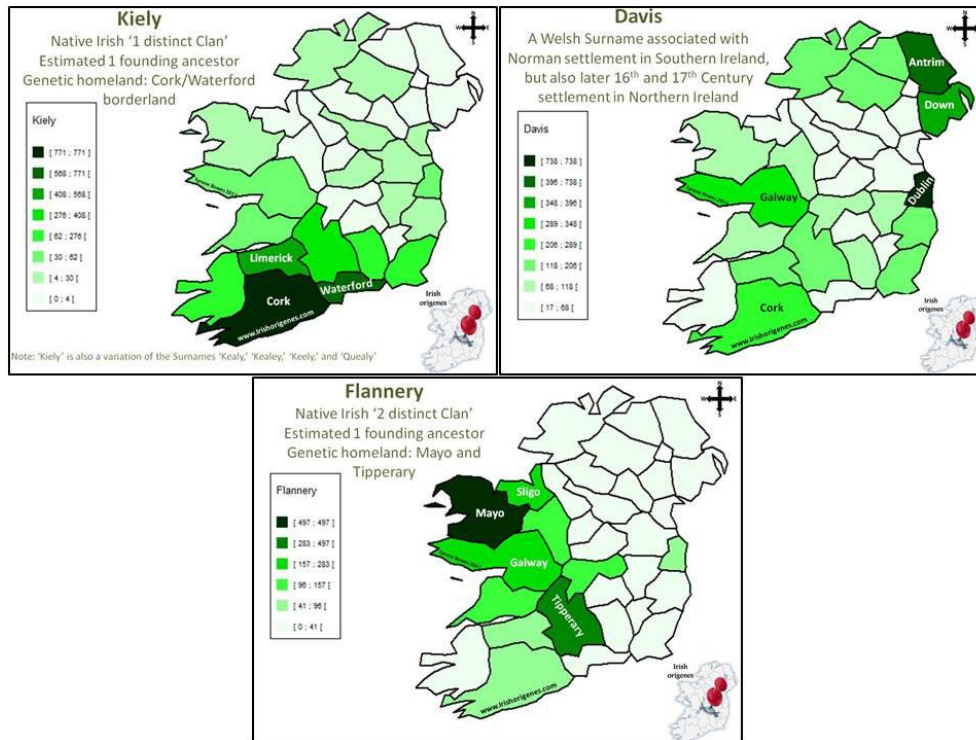


Figure 1: Mr Kiely's closest genetic matches are associated with Ireland. Kiely and Flannery are of Irish origin while Davis is associated with Wales and England; however none of these surnames cluster in the same area within Ireland in 1911.

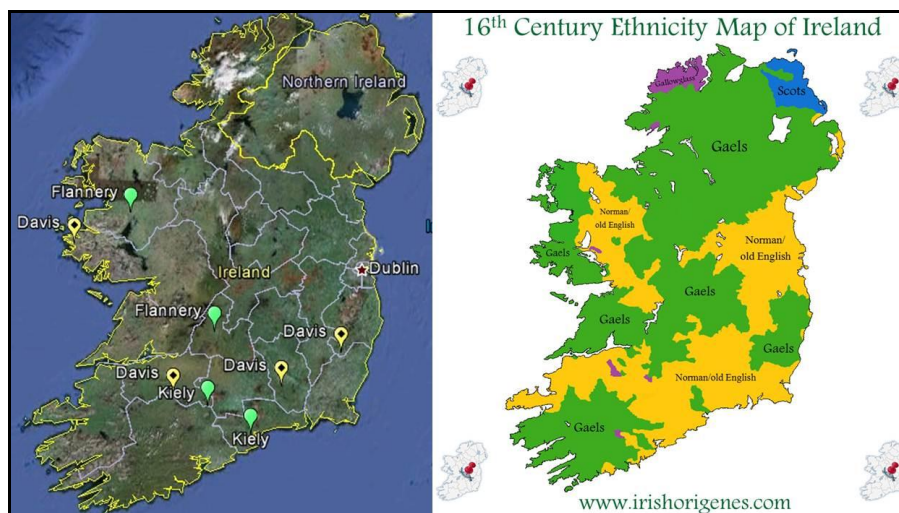


Figure 2: The Kiely, Davis, and Flannery farming communities are associated with areas of Norman settlement in Ireland. Although there is no overlap in the distribution between the Kiely surname and the closest genetic matches these surnames are all associated with areas of Norman settlement (yellow areas in the ethnicity map of Ireland).

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At the 25 marker level Mr Kiely matches many people called Doughty (Dowty/ Doty), Davenport, and Franklin. These surnames are not associated with Ireland and when one plots where they occur in the UK there is a clear association with England, in particular with Birmingham and Coventry, see **Figure 3**.

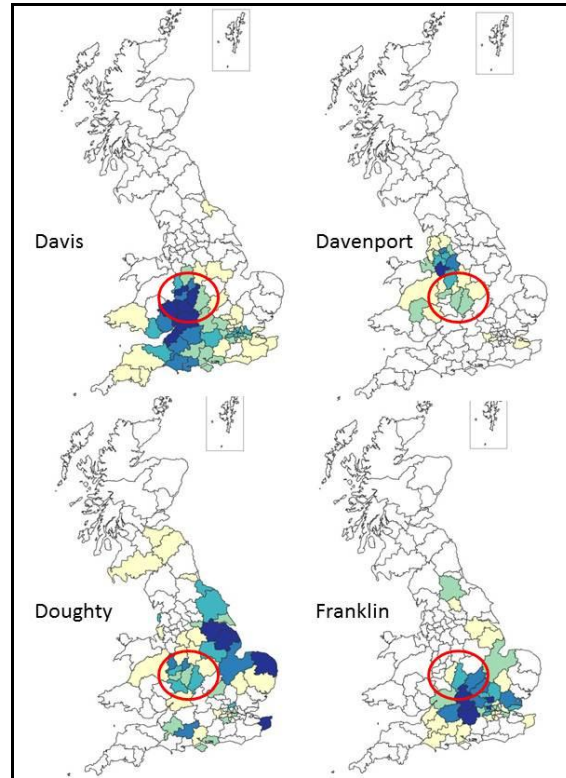


Figure 3: Surname distribution mapping of the British surnames that reoccur as a genetic match to test subject 'Kiely.' The Davis, Davenport, Doughty, and Franklin surnames are associated with England and overlap in their distribution in the Birmingham and Coventry area (red circle).

Land, like the surname and Y chromosome is typically passed from father to son. By placing pins within the UK in the areas where farmers with the English-associated surnames (in Table 1) occur, one sees a pattern emerge with the pins localising to a specific area, see **Figure 4**. This is in contrast to the diffuse distribution observed when the same process is applied to Ireland (Figure 2). The pins localise to the Birmingham and Coventry area. A closer inspection of the pattern within this area reveals that farmers with the surnames Davis, Doughty, and Franklin are found together on the east side of Royal Leamington Spa, see **Figure 5**. There are no Davenport farmers in 1841, although agricultural labourers with this surname are associated with the surrounding area. Additionally an examination of the placenames surrounding Royal Leamington Spa reveals a Davenport Farm to the east, and references to Franklin (road) and Davis (close) within the town. The area surrounding Royal Leamington Spa is Mr Kiely's Genetic Homeland. It is the area where Mr Kiely's ancestors lived when surnames became common (which in the UK occurred after the arrival of the Normans in 1066). It is also the area where his ancestors lived when the decision was made to leave for Ireland in or after 1169AD.

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Figure 4: Mr Kiely's reoccurring surname matches are associated with central England. By sticking a pin in the areas where farmers with the surnames **Davis**, **Davenport**, **Doughty**, and **Franklin** originate; one sees them clustering in a single location in west central England in contrast to a diffuse distribution in Ireland.

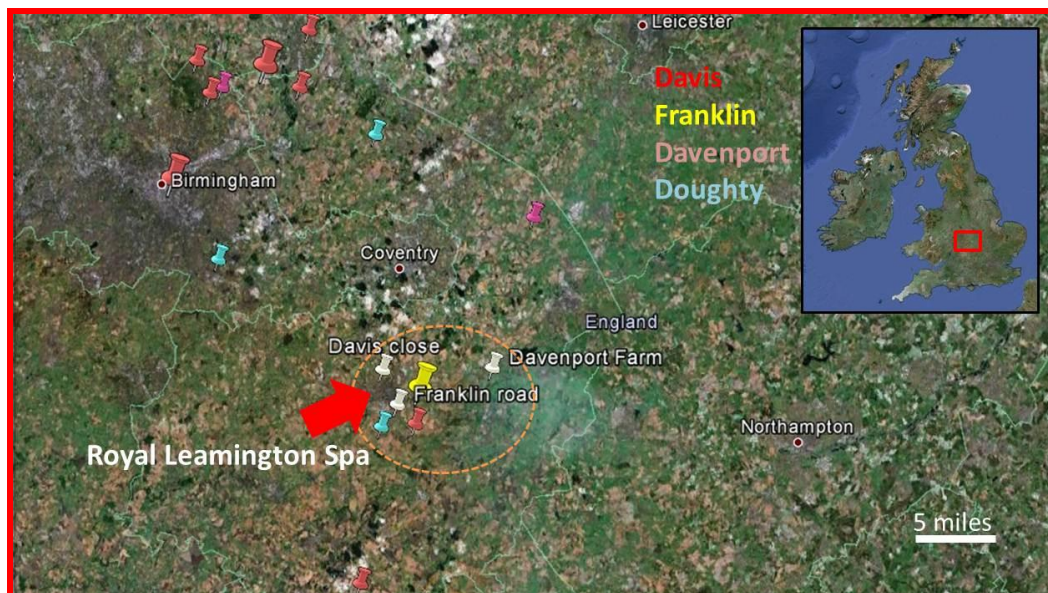


Figure 5: Mr Kiely's Genetic Homeland. Each pin represents a Farmer(s) with the surname **Davis**, **Franklin**, **Doughty**, or agricultural labourers with the surname **Davenport**. White pins indicate placenames associated with these surnames. These surnames and placenames cluster just east of a town called Royal Leamington Spa (**red arrow**) and it is here that Mr Kiely's Genetic Homeland is situated (**orange broken circle**).

CAN THE DNA SHED LIGHT ON WHERE MR KIELY'S ANCESTORS SETTLED IN IRELAND?

There are 2 clusters of Kiely farmers situated in northeast Cork and south Waterford. The long association of the Kiely's with this area is also reflected in at least one place name reflecting their presence; Curraghkiely (Kiely's marsh), see **Figure 6**. When a surname has a long association with an area there is a greater likelihood of non-paternal events arising in that location which can also be used to pinpoint precisely where one's ancestors settled.

The closest non-paternal match to Mr Kiely is a Mr Kent in 63/67 markers. The genetic distance to Mr Kent is similar to matches with Kiely's and so the shared ancestor must have lived in Ireland. The Kent surname also arrived with the Normans and its long association is also reflected in surrounding placenames. Farmers with the surname Kent also clusters close to the Kiely farming community surrounding Mitchelstown in County Cork. In fact just outside Mitchelstown in the Townland of Coolyregan there were 10 farmers one of whom is called Kiely and another Kent. This is clear evidence that the Kent's and Kiely's have lived in close proximity around Mitchelstown for 100's of years.

But what of the Kiely surname, where did it originate? The only records for Kiely in England in early 19th Century census data are for Irish immigrants. It may well be that the Kiely surname did arise in England near Royal Leamington Spa but that all of the Kiely's departed for Ireland with the Normans and settled in the southwest. Kiely may alternatively be an Irish spelling variant of an as yet unidentified English surname. Alternatively the surname may have arisen after his ancestor's arrival in Ireland. Many of the new settlers adopted the Irish language, customs, and surnames (like Kiely?) and become 'more Irish than the Irish.'



Figure 6: The Kiely's in Ireland. There are 2 clusters of Kiely farmers found in Waterford and on the Limerick/Cork border near Mitchelstown. Mr Kiely's closest genetic match is to an individual called Kent. Situated next to Mitchelstown is Coolyregan townland where one finds a single Kent and Kiely among 10 farmers living in there in 1911.

How to confirm a pinpointed 'Genetic Homeland'

The Kiely's association with Ireland is at least 800 years old. It has been hundreds of years since any distinction was made between those of Norman or old English ancestry and the Gaels. In fact the connection with the English Genetic Homeland appears to have been completely lost as there are no Kiely's (or similar sounding surnames) found in that location. The only area where a close genetic match may be confirmed will be in Mitchelstown and the surrounding countryside, as after hundreds of years the Kiely's can still to be found farming the land that their ancestors once conquered.

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.