

Case Study

Pinpointing the TERRY

Genetic Homeland

www.irishorigenes.com



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

Dr Tyrone Bowes
30th July 2012

INTRODUCTION

A commercial Y chromosome 37 marker 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 'Terry' was living in close proximity to others with whom he was related but who assumed other surnames like Power and Roche. 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 a 'non-paternal event' (NPE) like an adoption or 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 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 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 'Terry's' Y-DNA results to pinpoint his Genetic Homeland and at the end detail how you can 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 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 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 Terry are shown in **Table 1**.

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

Test subject	37 Marker Y-DNA test							
	37 marker level					25 Marker level		
	exact	-1	-2	-3	-4	exact	-1	-2
Terry	-	-	-	McNeill(x23)	McMeekin/Meek/McMicking(x5) Tipton(x12) ¹ Dedmon(x3) ¹ McIntyre(x3) McLaren(x3) Riggs(x2)	Gillespie/Gillaspie/Gillaspy(x23)	MacDonald(x3) Hansen(x3) Donaldson(x2) McInnes(x4)	Jensen(x2) Hudson(x4) French(x3) Bjareng(x2) Johnsson/Johnson(x10) Neely(x3) Robbins(x4) Bloomfield(x2) ¹ Christopher(x5) Blundell(x2) Anderson(x5) Lawrence(x2) Syms(x4) ¹ Bentley(x2)

Table 1: Reoccurring surname matches for test subject Terry. Each surname appears at the earliest point at which it occurs as a DNA match, for example the first match with a McNeill occurs at 34 of 37 markers but not all McNeill's will match at this level. In brackets are the numbers of different individuals that occur as a match. Coloured font indicates the ethnicity associated with each surname; **Scottish**, **Scottish and Irish**, **English**, **Viking-Scandinavian**, black font indicates surnames with multiple ethnic origins. ¹Multiple individuals from the same close family testing (these surnames are excluded from further analysis)

Mr Terry did not match other Terry's at the 37 or 25 marker level and this implies that his association with the 'Terry' surname is a result of a non-paternal event (NPE). At present the most likely suspect for the NPE was a member of the McNeill Clan, as many individuals with this surname occur as Mr Terry's most numerous and closest genetic matches. The McNeill Clan originates in Scotland. When one examines the distribution of the surnames that occur as Mr Terry's most prominent matches throughout Ireland in 1911, the association among these surnames with Scotland is particularly evident, see **Figure 1**. The Irish Origenes surname distribution maps reveal that Mr Terry's closest genetic matches are associated overwhelmingly with either Scottish Gallowglass and/or later 17th Century Scots-planter settlement in Ireland.

A common area of association within Scotland is particularly evident when one examines where in the UK these surnames occur in 1881, see **Figure 2**. There is an overwhelming association with Argyllshire in Scotland. This means that a common male ancestor lived in Argyllshire prior to the appearance of surnames.

Where do the Terry, McNeill, McMeekin, McIntyre, McInnis, and Gillespie surnames originate when found in Ireland?

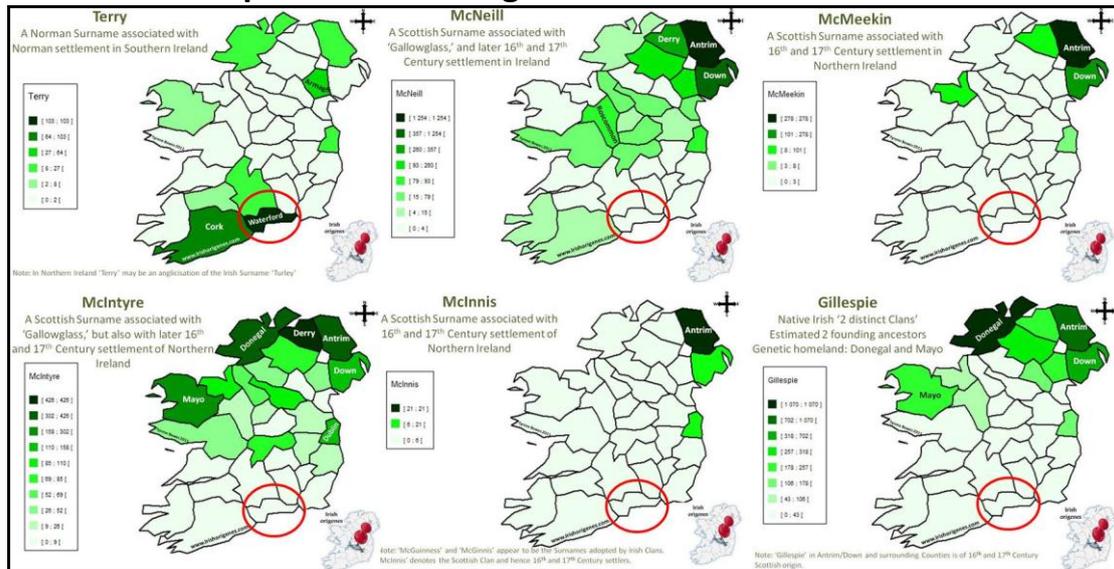


Figure 1: Surname distribution maps for Mr Terry's closest genetic matches show an association with Scottish Surnames. Terry in Ireland is associated with Norman settlement in Southern Ireland, particularly in Waterford (red circle). However Mr Terry's most prominent reoccurring genetic matches are to surnames associated with Gallowglass and/or 17th Century Scottish Planter settlement in Ireland.

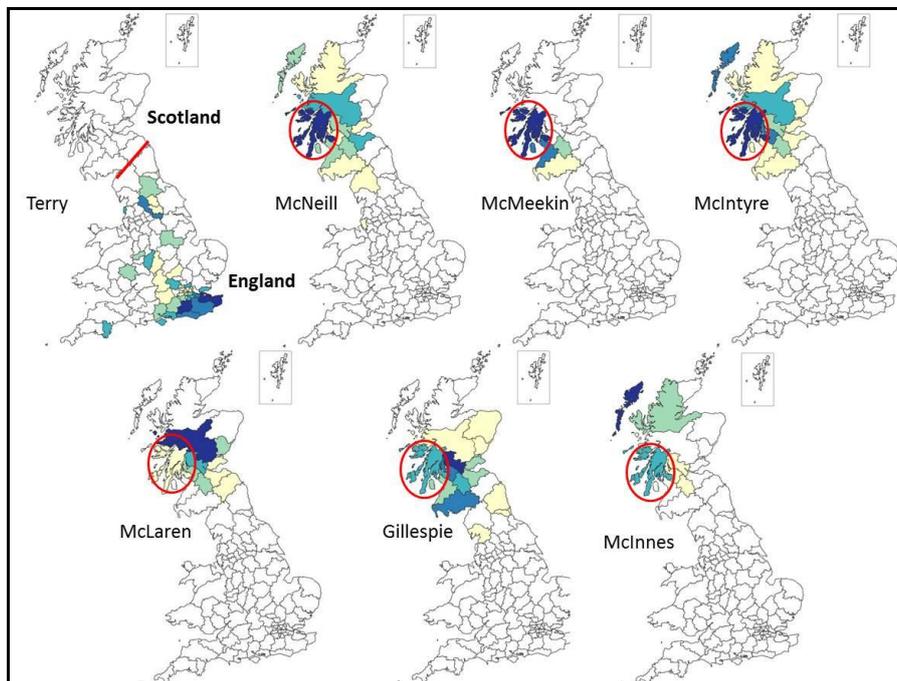


Figure 2: The test subject Terry's genetic matches show a clear association with Argyllshire in Scotland. Surname distribution mapping in 1881 demonstrate that the Terry surname is associated with England while in comparison his most prominent surname matches are associated exclusively with Scotland, and in particular with Argyllshire (red circle).

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Land, like the Y chromosome and surname is typically passed from father to son and since farmers can still be found farming the land of their ancestors one can examine where the farming communities associated with each surname existed and see if they overlap or cluster to a particular area. Not all surnames in the UK have a link to the land and the link to the land is more fragile in the UK due to the early industrial revolution. One must therefore examine the 1841 census which is regarded as the first complete census of the UK. The 1841 census does indeed confirm a McNeill, McIntyre, McLaren, Gillespie, and McInnes farming community overlapping south of Oban near the Mull of Kintyre (**orange broken circle**), see **Figure 3**.

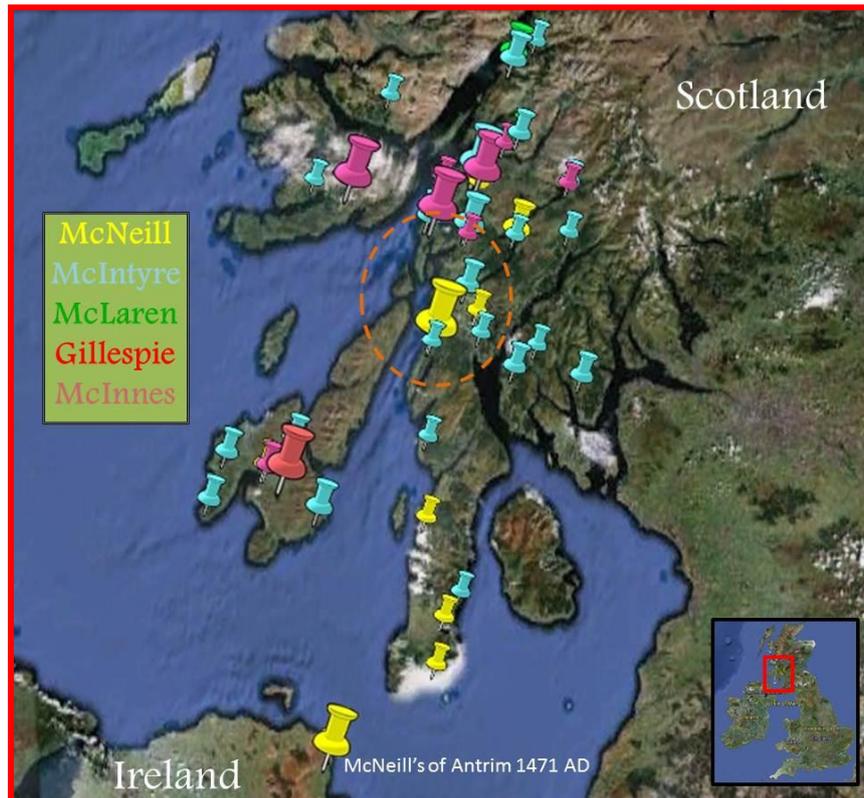


Figure 3: The McNeill, McIntyre, McLaren, Gillespie, and McInnes farming community in Argyllshire in 1841. When one plots where the McNeill (**yellow pins**), McIntyre (**blue pins**), McLaren (**green pins**), Gillespie (**red pins**), and McInnes (**purple pins**) farmers are found in 1841 they overlap in a particular area (**orange broken circle**). McMeekin is a rare surname and no farmers called McMeekin or Terry could be found in Argyllshire in 1841.

The Clan system in Scotland has been extensively recorded and documented and is beautifully illustrated in Bartholomew's Clan map. This map features the lands (or the spheres of influence) of the most prominent Clans in Scotland from around 500 years ago. Almost everyone of Scottish descent will share ancestry with at least one of these prominent Clans and families.

When one examines the Clan territories of the Western Isles where the McNeill farming community clustered in 1841 one can see that this area corresponds to the ancient McNeill Clan territory that surrounds Swin Castle, see **Figure 4**. To the North one finds Mr Terry's genetic cousins the McInnes, McIntyre's, MacDonald's, and McLaren's. It is in the ancient heartland of the McNeill's that Mr Terry's Genetic

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Homeland is to be found. It is there that Vikings settled and adopted the language and customs of the local Gaels, and it is from here that the McNeill's ventured for literally hundreds of years to Ireland as mercenaries.

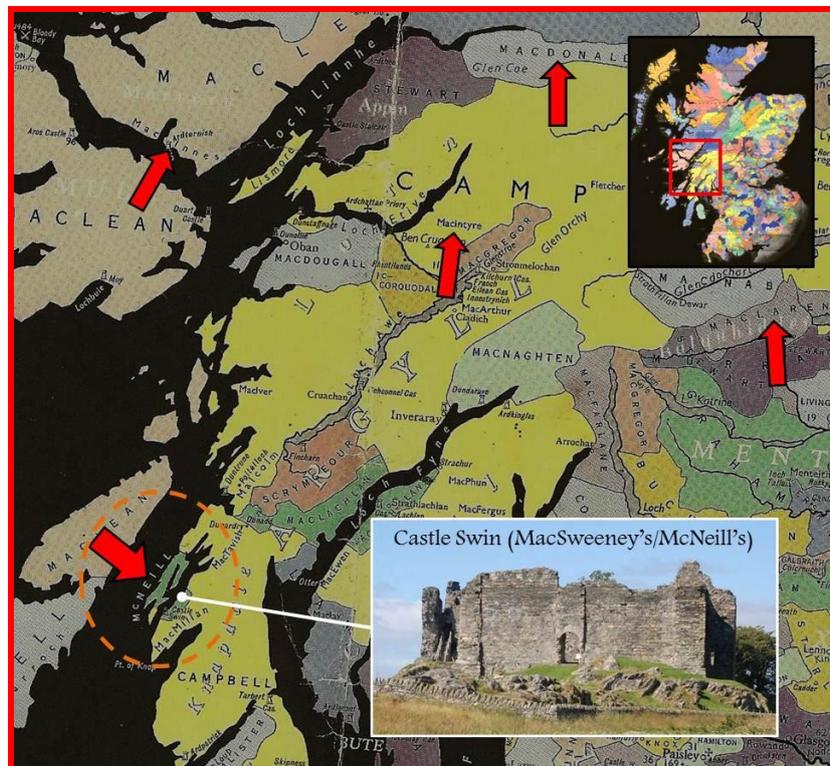


Figure 4: The Clan territories of the Western Isles of Scotland. Mr Terry's Genetic Homeland (orange broken circle) is situated in the Western Isles of Scotland in the ancient Clan territory of the McNeill's which surrounds the ruins of Castle Swin on the Kintyre peninsula. It is here that the McNeill farming community could be found in 1841 farming the lands of their ancestors and surrounded by the ancient Clan territories of their genetic cousins the McInnes, McIntyre's, McLaren, and MacDonald's (red arrows).

The Terry ancestral link with Ireland

Unlike in Scotland, both McNeill and Terry surnames have a long historical associated with Ireland; Terry with the arrival of the Normans in 1169AD, and McNeill with the arrival of the Gallowglass from 1259AD onwards. For nearly 400 years there was a steady flow of mercenary Gallowglass (and later Redshanks) to Ireland from the Western Isles of Scotland. Many like the Sweeney's (the prior residents of Swin castle) relocated completely to Ireland, while the McNeill's maintained Clan territories in both Ireland and Scotland (the McNeill's of the Glens of Antrim), see **Figure 5**. The likelihood is that the NPE that occurred in Mr Terry's paternal ancestry occurred in Ireland.

The Gallowglass were originally Vikings who settled in the Western Isles of Scotland but who adopted the local Gaelic language and culture. This distant Viking ancestry is indeed reflected in both Mr Terry's I1 haplogroup which often reflects Scandinavian ancestry, and his genetic matches to numerous Scandinavian individuals that begin at the 25 marker level (see **Table 1**). The Gallowglass, which literally translates as

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'Foreign Gaels' were noted for their fighting prowess and were gradually employed all over Ireland by Gaelic-Irish chiefs, Norman lords, and even the English authorities. Some like the McNeill's and MacSweeneys gained some degree of independence and established their own territories in Ireland, see **Figure 5**.

In 1911 the legacy of the Gallowglass could still be found all over Ireland in the farming communities that bear their surnames. These surnames can be found in Counties Cork, Carlow, Kilkenny, and Wexford which surround the Terry's of Waterford, see **Figure 5**. There are also historical accounts of Gallowglass in Waterford. In fact it was in Affane deep in Waterford that the last private battle fought on Irish soil occurred in 1565 between the Anglo-Irish families of Fitzgerald and Butler. Both sides fought with contingents of Gallowglass warriors (*Ireland: its scenery, character* By Samuel C. Hall, Anna Maria Hall page 292).

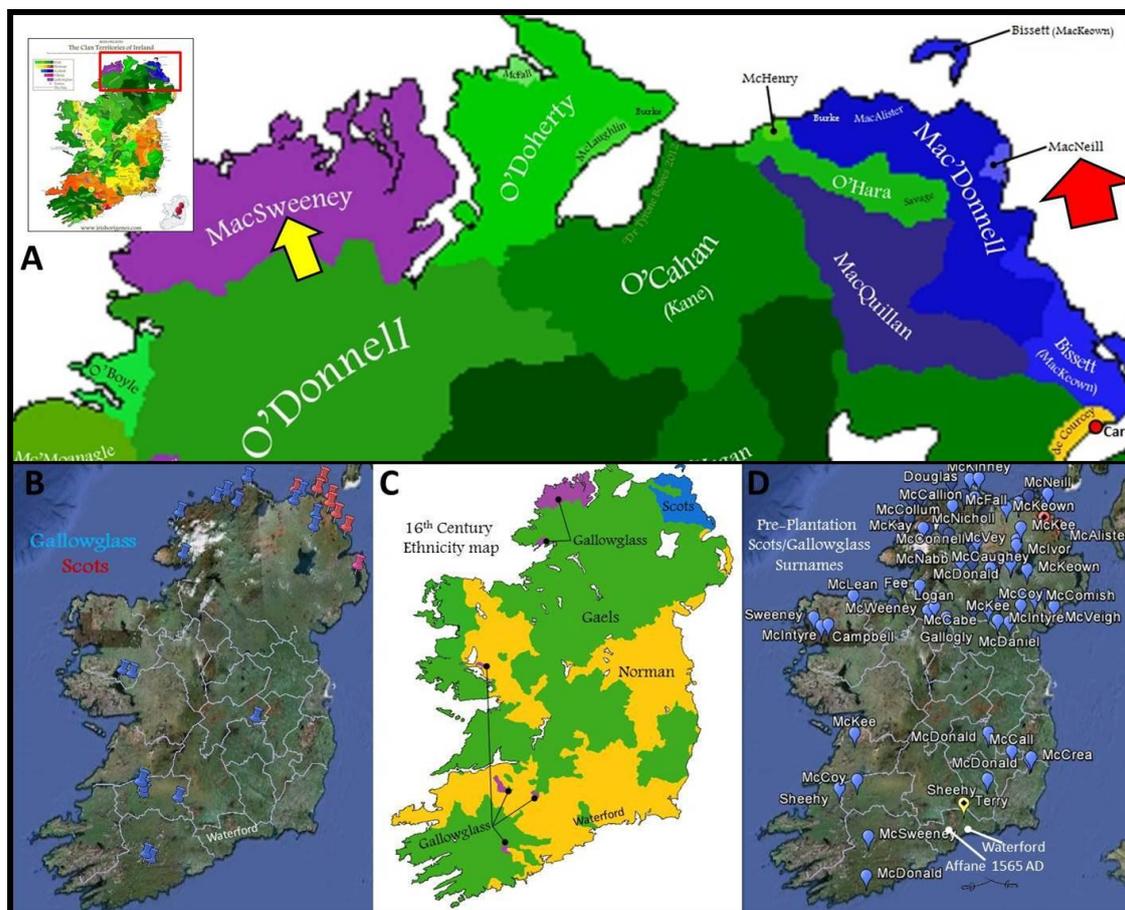


Figure 5: The Scots-Gallowglass in Ireland. The Gallowglass settled mainly in Northern Ireland; the MacSweeney's literally relocated to Donegal, while the McNeill's settled in Antrim, yellow and red arrow respectively **Panel A**. However the Gallowglass eventually spread throughout Ireland building castles (blue and red pins; **Panel B**) on territories acquired from their Norman or Gaelic employers (**Panel C**). The legacy of the Gallowglass can be found scattered throughout Ireland in the farming communities that bear their surnames (blue balloons), some of these communities are found close to the Terry's of Waterford, **Panel D**. This close association appears to have resulted in the NPE in Mr Terry's paternal ancestry.

How to confirm a pinpointed 'Genetic Homeland'

Confirmation of the Genetic Homeland will require the DNA testing of farmers with the McNeill surname currently living near Castle Swin. If the NPE occurred in Waterford there may well be Terry farmers in Waterford who are a genetic match to Mr Terry, but a large pool of Terry's would need to be tested to confirm this.

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.