

Contact me tyronebowes@gmail.com for a free consultation
on your Y-DNA results

Pinpointing the MCREYNOLDS Scottish Paternal Ancestral Genetic Homeland

A Scottish Case Study

www.scottishorigenes.com



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

Dr Tyrone Bowes
Updated 14nd May 2014

Introduction

A commercial ancestral 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 1,000 years ago one's direct medieval male ancestor, the first for example to call himself 'McCrintle' was living in close proximity to others with whom he was related but who assumed other surnames like Ferguson, Boyd and McWhirter. Given that hundreds of years have passed since paternally inherited surnames became common, there will be many descendants of those individuals, some of whom will today undergo commercial ancestral DNA testing. Hence the surnames of one's medieval ancestor's neighbours will be revealed in today's Y-DNA test results.

Early 19th century census data demonstrates that Scottish surnames could still be found concentrated in the areas from which they originated. One can therefore use census data to determine the origin of the surnames that appear in one's Y-DNA results, identifying an area common to all, and thus revealing a '**Paternal ancestral genetic homeland.**' The paternal ancestral genetic homeland is the 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 ancestor first picked his surname surrounded by relatives who picked others. It is the area where ones ancestors left their mark in its placenames, its history, and in the DNA of its current inhabitants. Since modern science can pinpoint a paternal ancestral paternal ancestral genetic homeland it can also be used to confirm it by DNA testing individuals from the pinpointed 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 anyone with Irish ancestry can trace direct descent. 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. Since Scotland adopted a similar Clan based society these scientific findings can be applied to Scotland and people with Scottish ancestry.
2. Often people are looking for their DNA results to trace back to a specific area. One must remember that the results typically reflect one's ancestor's neighbours from around 1,000 years ago. As a result, if your recent Scottish ancestor was originally an Anglo-Saxon settler, Viking raider, or 12th Century Norman your DNA results will reflect earlier English, Welsh, French, and possibly Scandinavian origin. One must approach this process with an open mind!

‘McReynolds’ Case Study

Interpreting the Y-DNA test results

To pinpoint a paternal ancestral genetic homeland one must first identify the surnames that reappear as genetic matches. These recurring surnames will reflect the surname of a medieval ancestors neighbour. Results for test subject ‘McReynolds’ are shown in **Figure 1**.

Test subject	37 Marker Y-DNA test								
	37 marker level					25 Marker level			
	exact	-1	-2	-3	-4	exact	-1	-2	
McReynolds	-	-	-	McReynolds/McRannell(x4)	Ferguson(x28) Thompson(x13) Boyd(x7) McTaggart/Taggart(x2) Gunning(x2) Berry(x2) ¹ Gillespie(x25) Henry(x8) McCullar/McCullough/McCulloch(x14)	-	Adamson(x2) McGregor(x2) Givens(x3) Mills(x3) ¹ Malone(x13) Harrison(x3) McWhirter/McWhorter(x15) Hudson(x4) ¹ Quinn(x2)	Hillis/Hillhouse(x2) Hemphill(x12) Gordon(x2) Agnew(x7) Hannah(x3) Diamond(x8) Rice(x4) Hall(x2) ¹ Hunter(x2) Lindsey(x2) Mitchell(x9) O'Neill(x6) Jackson(x3) McEvoy/McAvoy(x2) Byrne(x2) Spenser(x3) ¹	

Figure 1: Genetically recurring surname matches for test subject McReynolds. Surnames appear at the point at which they first occur as a genetic match e.g. the first match to an individual called McReynolds occurs at 34/37 markers although not all McReynolds may match at that level. Figures in brackets represent the number of individuals with a particular surname who appear as a genetic match. Coloured font indicates the ethnicity associated with each surname; **Scottish**, **Irish**, black font indicates surnames with multiple ethnic origins. ¹Members of the same close family recruited for Y-DNA testing and excluded from further analysis.

Upon commercial ancestral Y-DNA testing Mr McReynold’s matched other McReynolds who tested independently, which indicates that he has retained the surname of a McReynolds-Adam (the first to take that surname) who lived approximately 1000 years ago when paternally inherited surnames became common. Mr McReynold’s closest most frequent genetically-recurring surnames are associated either exclusively with Scotland; like Boyd, Ferguson, Adamson, McGregor and McWhirter, or are to surnames associated with Scotland like McCulloch, Thompson and Gillespie, see **Figure 1**. The dominance of Scottish surnames in Mr McReynold’s Y-DNA results reveals a paternal ancestral link with Scotland dating from at least the time when paternally inherited surnames became common. The scattering of Irish surnames in Mr McReynold’s Y-DNA reflects the shared ancestry between the Scots and Irish which has arisen from multiple population movements back and forth between both lands over many millennia.

A Paternal Ancestral link With Ayrshire

The method of using genetically recurring surname matches as revealed by commercial ancestral Y-DNA testing to pinpoint a paternal ancestral genetic homeland works by exploiting the link between the Y chromosome, surname, and land which are typically passed from father to son through the generations. In the absence of a link to the land the process becomes more challenging. One must therefore determine whether the McReynolds had a link to the land by examining

‘McReynolds’ Case Study

where farmers with this surname were found. The earlier in time that a link can be established the better as over time (particularly in the UK due to the industrial revolution) the link with the land is lost. There are no McReynolds farmers in 1841 although there are plenty of farmers with the surnames that appear in Figure 1. When one examines where farmers with these surnames occur within the UK, they reveal a paternal ancestral link with the bordering Counties of Ayrshire, Wigtownshire, and Kirkcudbrightshire in Southwest Scotland, see **Figure 2**.

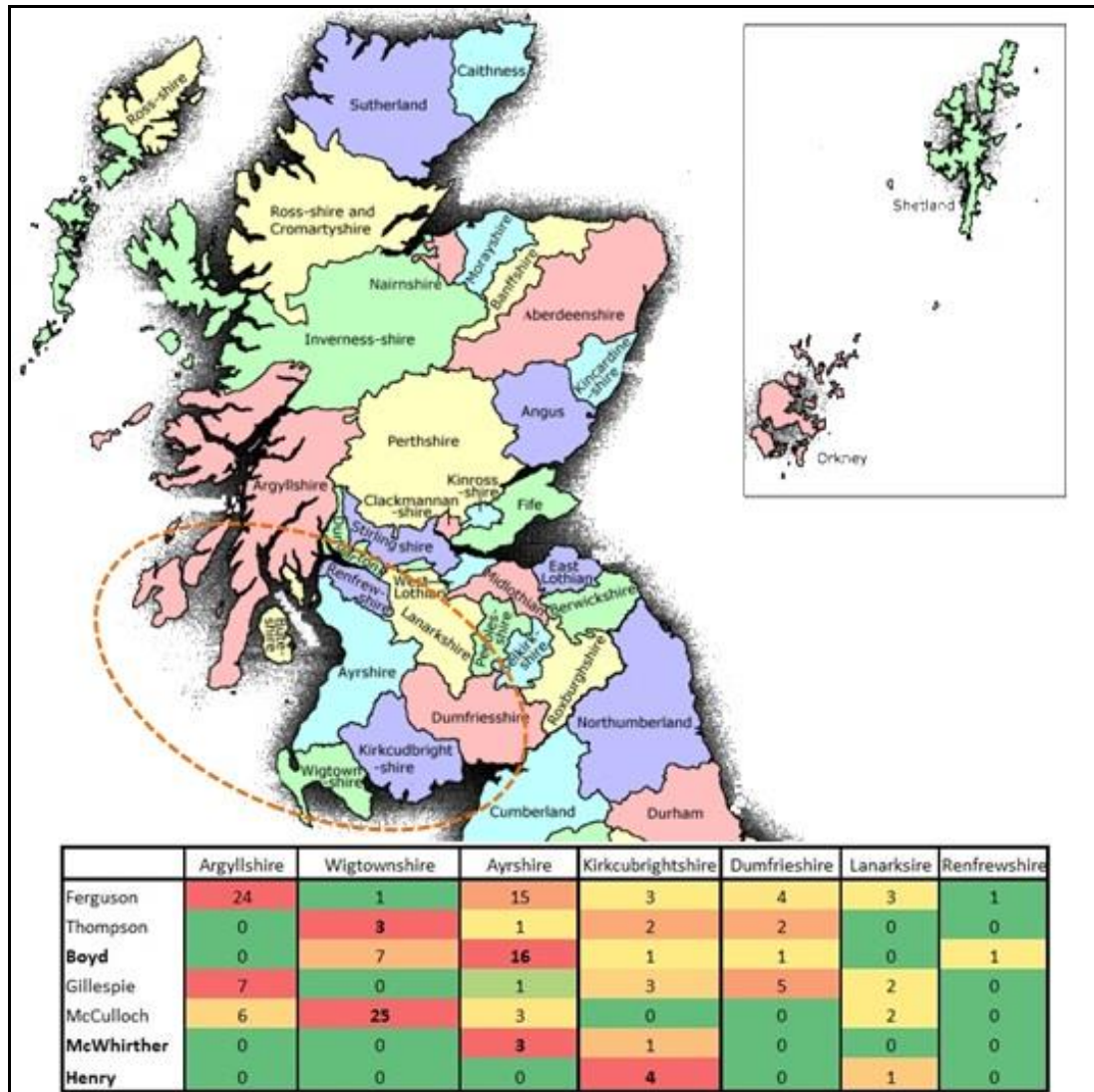


Figure 2: Farmers with the surnames that appear as Mr McReynold’s closest genetic matches are associated with Southwest Scotland. In 1841 Boyd and McWhirther farmers were associated almost exclusively with Ayrshire, while the McCullochs were found almost exclusively within neighbouring Wigtownshire. Clusters of Ferguson, Gillespie, Henry, and Thompson farmers were also found in Southwest Scotland (orange broken circle).

The ancestral link to Southwest Scotland can be further explored by examining where within that area the Ferguson, Thompson, Boyd, Gillespie, McCulloch, McWhirther, and Henry farmers lived; the area where these communities live in closest proximity to one another will reveal Mr McReynold’s paternal ancestral

'McReynolds' Case Study

genetic homeland, see **Figure 3**. These farming communities are all associated with Galloway, crucially the McWhirter farmers, in contrast to the other surnames, is associated with a single geographical area located within Southern Ayrshire, see **Figure 3**. An examination of surnames associated with this area reveals farmers called McCrindle. The surnames McReynolds and McCrindle are both derived from the Viking personal name 'Raghnal' and are associated with Ireland and Scotland respectively.

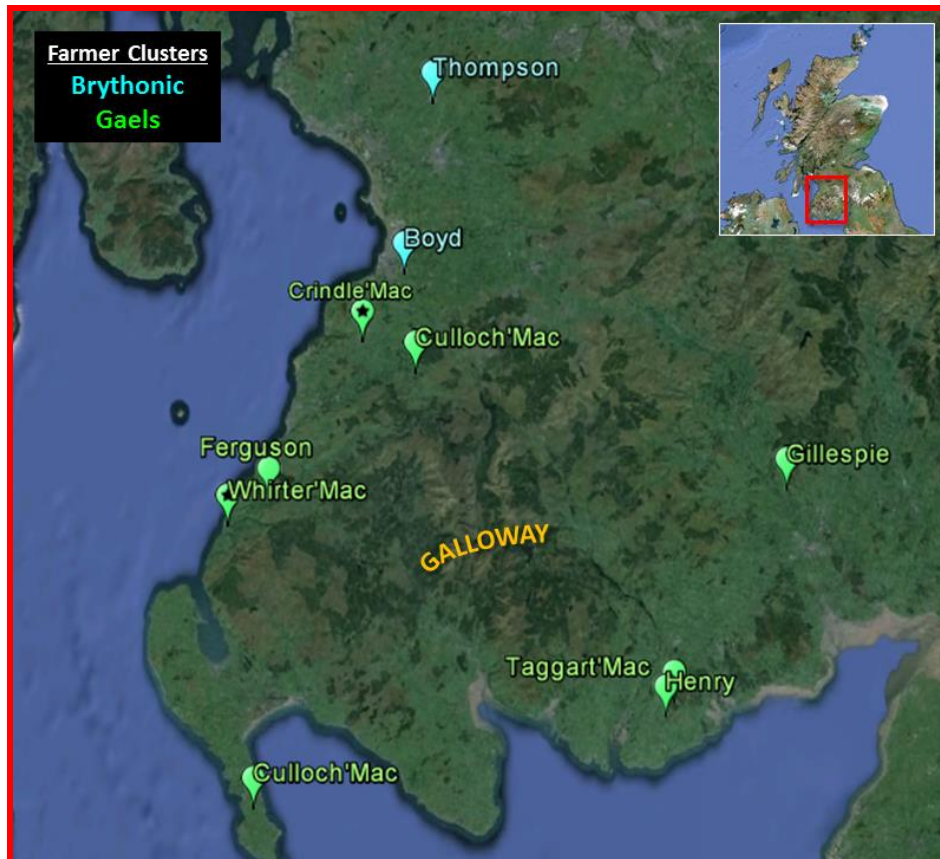


Figure 3: Mr McReynold's Y-DNA results reveal a paternal ancestral link with Galloway in Southwest Scotland. Pins have been placed where farmers with each surname clustered in 1841. In contrast to most of these surnames which can be associated with more than one location, the surname McWhirter is exclusive to Southern Ayrshire where census data also reveals a cluster of farmers called McCrindle (also exclusive to Southern Ayrshire in 1841). McCrindle is the Scottish form of McReynolds. Starred pins indicates surnames exclusive to that location.

The Clan Territories of the Southern Ayrshire

By examining the locations of the castles and towerhouses that are historically associated with a particular surname, it reveals that medieval Scotland was a patchwork of territories dominated by notable Clans and Families. Remarkably almost everyone with Scottish paternal ancestry will be genetically related to at least one of these prominent Clans or families that once ruled over one's paternal ancestral genetic homeland. Although the McReynolds, or rather the Scottish McCrindles do not feature on this map, their genetic relatives the Fergusons, Boyds and McWhirters feature prominently along the coast of southern Ayrshire in

'McReynolds' Case Study

Southwest Scotland, see **Figure 4**. Strikingly the Clan territories of the Fergusons, Boyds, and McWhirters are adjacent to one another, and are found close to the town of Girvan; the same area where the Scottish McCrindle farming community clustered in 1841.

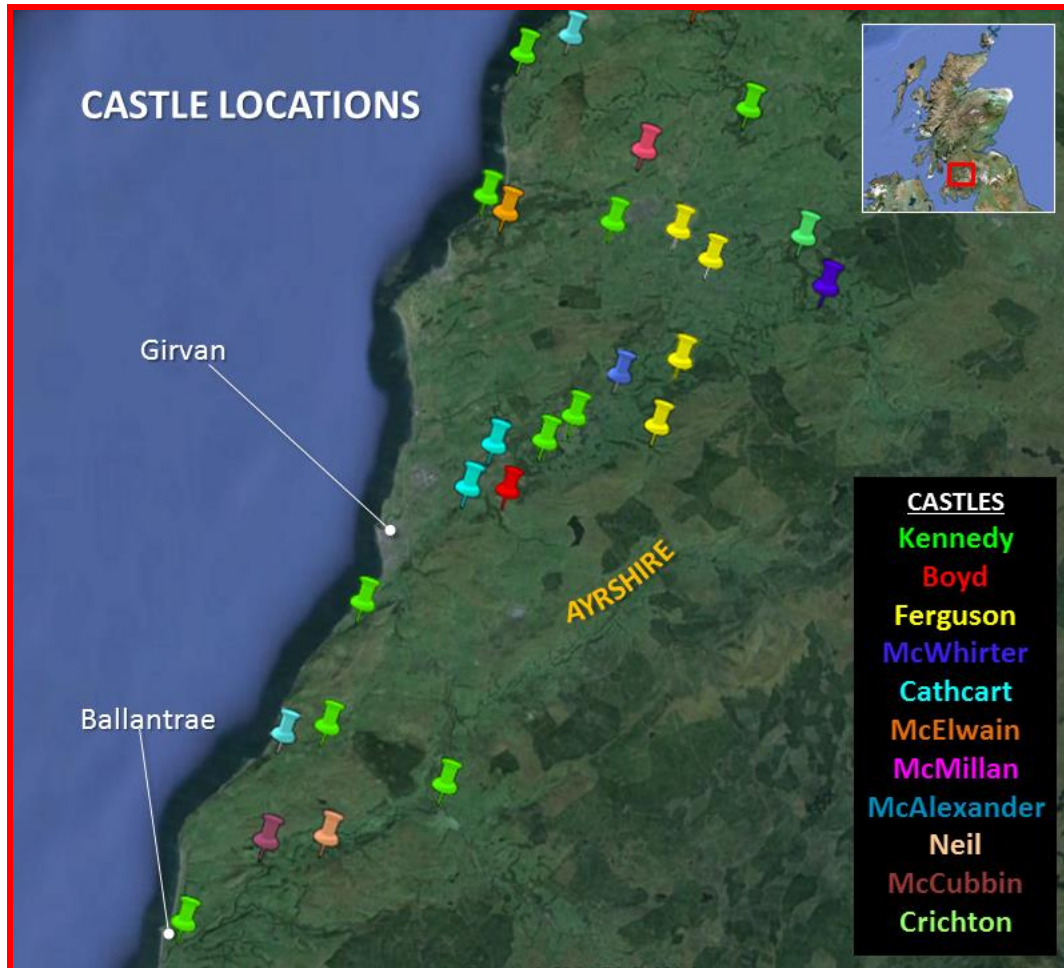


Figure 4: The Clan Territories of Southern Ayrshire. Although there are no castles or towerhouses associated with the Scottish McCrindles, the test subject shares common ancestry with the Boyds, Fergusons, and McWhirters who are all historically associated with the area that lies to the northeast of Girvan town where the McCrindle farming community clustered in 1841.

The Irish connection

Although no McReynolds farmers can be found in Scotland in 1841 they can be found in Ireland, particularly in Ulster which was heavily settled from 1610AD onwards by Lowlander Scots from Ayrshire, Wigtonshire, Kirkcudbrightshire, and Dumfriesshire, see **Figure 5**. In 1911 the majority of McReynolds farmers were Protestant compared to the native Gaelic Irish who were overwhelmingly Catholic, a finding that supports their Planter-Scots origin. The McReynolds farmers are found in 3 main clusters close to the location of Plantation Bawns and Plantation towns like Cookstown, see **Figure 5**. Close to these areas of settlement one also finds evidence of their historical association with this area in the placenames found close by; including Kilculmagrandal, Moneyrannell, Randalstown, and Ballymacrandal.

'McReynolds' Case Study

In Ireland McReynolds/Reynolds is the most common anglicised version of the personal name 'Raghna' which upon translation and depending on your location becomes Reginald, Reynolds, or Randal. Randal is the most frequent form of this surname in placenames close to areas of McReynolds settlement and it is almost certainly the case that McReynolds is a modern Irish variant of Scottish McCrindle. This is typical in the evolution of surnames which tend to change more and more as one's ancestors moved further and further from the place of origin.

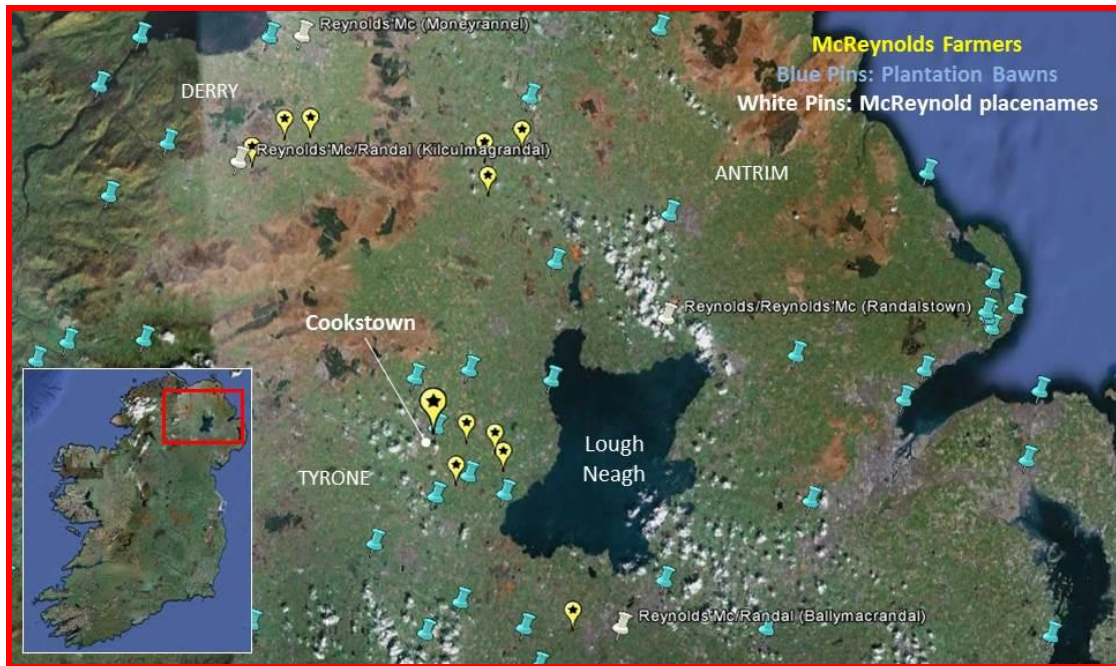


Figure 5: The Ulster-Scottish McReynolds. The Scottish McCrindles arrived in Ireland in 1610AD and over time the surname evolved into Irish-McReynolds. The McReynolds surname in Ulster is associated with 3 main locations all of which are situated close to Plantation Bawns (Blue pins) or plantation towns like Cookstown. One also finds numerous placenames associated with the McCrindles/McReynolds including Moneyrannel, Kilculmagrandal, Ballymacrandal and Randalstown.

Mr McReynold's Paternal Ancestral Genetic Homeland

In 1841 the 'McCrindle' farming community clustered to the northeast of Girvan town and it is there that Mr McReynold's paternal ancestral genetic homeland is to be found, see **Figure 6**. It was there that the test subject's direct male ancestor lived when he first inherited his surname surrounded by male relatives who became Fergusons, Boyds, and McWhirters. All of these clans have left evidence of their long ancestral links with this area in the placenames and historical monuments one finds there including Macrindleston on the outskirts of modern Girvan, and Craigmawhannal (McCrindle's rock) to the east in the Galloway hills, see **Figure 7**. In about 1610AD many of these Lowlander Clans including the McCrindles took part in the Plantation of Ulster, where over time the McCrindle surname evolved into Irish McReynolds.

'McReynolds' Case Study



Figure 6: Mr McReynold's paternal ancestral genetic homeland in Southern Ayrshire. In 1841 the 'McCrindle' farming community clustered to the northeast of the town of Girvan. It is in the lands to the northeast of Girvan that Mr McReynold's paternal ancestral genetic homeland is to be found (orange broken circle). It was here that a tribal group of related males gave rise to the surnames that appear in the test subjects Y-DNA results and where evidence of their long ancestral links with this area is reflected in the placenames.



Figure 7: McCrindle placenames in Southern Ayrshire. McCrindlestown lies just north of Girvan town, while Craigmawhannal (McCrindles Rock) lies to the east in the Galloway hills.

'McReynolds' Case Study

How to confirm the McReynolds Paternal Ancestral Genetic Homeland

To confirm the ancestral connection to the Scottish McCrindle's will require the Y-DNA testing of farmers with that surname who currently live in Southern Ayrshire. To confirm the link between the Scots McCrindle's and Scots-Irish McReynolds will require the commercial ancestral Y-DNA testing of farmers with the McReynolds surname currently living in Northern Ireland.

**Contact me tyronebowes@gmail.com for a free consultation
on your Y-DNA results**