

# Pinpointing the ROBINSON Scottish Paternal Ancestral Genetic Homeland

A Scottish Case Study

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

---



Dr Tyrone Bowes  
Updated 2<sup>nd</sup> November 2016

### Introduction

A simple painless 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 individuals with many 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 'Robinson' was living in close proximity to others with whom he was related but who inherited other surnames like MacKay, Campbell and MacAuslan. Given that 1,000 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 Y-DNA testing. Hence the surnames of one's medieval ancestor's neighbours will be revealed in today's Y-DNA test results.

Early 19<sup>th</sup> 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 reveal ones '**Paternal Ancestral Genetic Homeland.**' The 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 inherited his surname surrounded by relatives who inherited 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 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 surnames had a single founding ancestor, that's an estimated 1,500 Adams 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 male ancestor (the surname Adam), the other 50% of males will have an association that has arisen as a result of what are called 'non-paternal events' usually a result of adoptions or maternal transfer of the surname. Since Scotland adopted a similar Clan based society these scientific findings can be applied to Scotland and people with Scottish paternal 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 one's Scottish ancestor was descended from an Anglo-Saxon settler, Viking raider, or 12<sup>th</sup> Century Norman one's DNA results will reflect earlier English, Welsh, French, and possibly Scandinavian origin. One must approach this process with an open mind!

### Interpreting the Y-DNA test results

To pinpoint a paternal ancestral genetic homeland one must first identify the surnames that appear as one's genetic matches, see **Figure 1**. Those surnames, particularly one's that *recur* throughout one's Y-DNA results will typically reflect the surnames of one's medieval ancestor's neighbours, see **Figure 2**.

Genetic Distance	Name	Most Distant Ancestor	Y-DNA Haplogroup	Terminal SNP	Match Date
7	McCoy	Un-identified McCoy, 1800s Pike County, KY	R-BY153	BY153	1/9/2016
7	Campbell	Alexander Campbell (1816) of New York and Vermont,	R-M269		1/9/2016
7	McCoy	Richard McCoy, B. 1752 Montgomery County VA	R-BY153	BY153	1/9/2016
7	McCoy	Crinian, Mormaer of Atholl b. 975 d. 1045	R-BY153	BY153	1/9/2016
7	Roberts	Un-identified McCoy, 1800s Pike County, KY	R-BY153	BY153	1/9/2016
7	Campbell	Duncan Campbell 4th of Glenlyon 1576	R-BY3140	BY3140	1/9/2016
9	Bissett	Jacob Bissett b. 1786, Maryland USA L1065+	R-Z16328	Z16328	1/9/2016
9	McCoy	Richard McCoy, B. 1752 Montgomery County VA	R-BY153	BY153	1/9/2016
10	Baxter	James Baxter, b. 1820 and d. unk.	R-M269		9/20/2016
10	MacDonald	John MacDonald b1803	R-BY154	BY154	1/9/2016
10	Baxter	Charles Baxter abt 1816, d. 1896	R-M269		1/9/2016

**Figure 1:** Snapshot of test subject Robinson's closest genetic surname matches at the 111 marker level as revealed in the Y-DNA database. The more Y-DNA markers two people share the more recent their shared paternal ancestor once lived. The test subject's closest genetic matches are dominated by Scottish surnames, some of which like MacCoy (red arrows), Campbell (blue arrows), and Baxter (yellow arrows) appear as recurring genetic matches. These are a snapshot of the surnames that arose among related males living in a specific part of Scotland.

Upon commercial ancestral Y-DNA testing the test subject did not match any other individuals called Robinson. This indicates that the test subject may not directly descended from a Robinson-Adam; literally the first male ('Adam') to take the 'Robinson' surname who lived approximately 1000 years ago when paternally inherited surnames became common. Robinson is a surname that is associated with Scotland where it is regarded as a possible variant of the more common 'Robertson,' and the test subject's closest genetic matches are dominated by individuals with exclusively Scottish surnames many of which appear frequently, see **Figure 2**. The test subject's Y-DNA results reveal that a Scottish paternal ancestor acquired the 'Robinson' surname at some point in his paternal ancestry. The test subject's Y-DNA results also reveal that his paternal ancestor lived among a tribal group of related males somewhere within Scotland, among whom arose surnames like, MacKay (McCoy), Campbell, Buchanan and MacAuslan.

## Robinson Part II

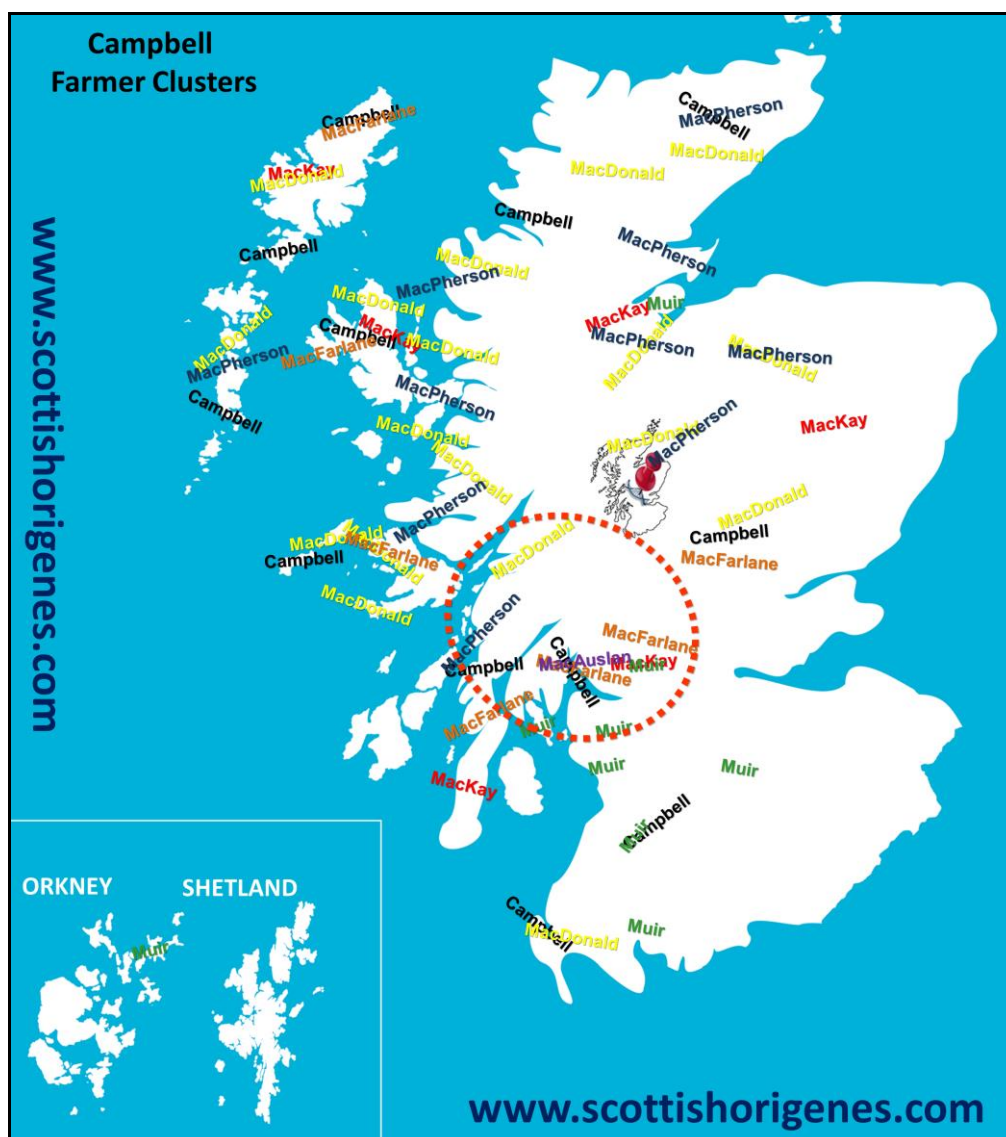
Test Subject	Haplogroup	Y-DNA Test Results					
		111 Markers		67 Markers			
		-7	-10	-4	-5	-6	-7
Robinson	R-M269	McCoy/Keis/MacKay (x11) Campbell (x21)	Baxter (x3)	Craig (x3) MacDonald (x14) MacFarlane (x10) Moore (x8)	Anderson (x2) Buchanan (x20) Cowan (x2) Lawrie/Lourie/Lowery (x3) MacAuslan/McCaslin (x6) MacMillan/McMullan (x2) MacPherson (x8) McAlister (x3) Napier (x2) Reddoch (x2) Welsh/Welch (x2)	Alexander (x15) Austin (x3) Chisholm (x2) Clark (x2) Davis (x3) Ferguson (x6) Graham (x2) Griffin (x4) Hunt (x2)1 McArthur (x3) Logan (x4) McIntosh (x3) MacLennan (x3) Matheson (x2) May/Mays (x2) McCallum (x5) McCann (x2) McGregor (x3) McLaren/McLaurin (x3) MacRae (x4) Norton (x5) Patterson (x4) Roxk/Rocks (x2) shively (x2) Stewart (x3) Swaney/Sweeney (x8) Young (x6)	Allan/Allen (x2) Forbes (x5) Henderson (x2) Livingston (x3) McHenry (x2) Morrison (x6) Neilson/Nelson (x2) Sanders/Saunders (x5) Tate (x4) Taylor (x4) Turner (x2)

**Figure 2:** The test subject's closest recurring genetic surname matches reveal a paternal ancestral link with Scotland. The Robinson can be of Scottish origin and upon Y-DNA testing the test subject matched many individuals with Scottish surnames that recur throughout his Y-DNA results. Surnames are shown at the point at which they first occur as a genetic match, for example the first match to an individual called McCoy, Kies or McKay occurs at 107/111 markers, but not all McCoy, Kies or McKays will match at that level. Figures in brackets reveal the number of different individuals with a particular surname who appear as a genetic match at the 111 and 67 marker level. Coloured font denotes the ethnicity associated with each surname; **Scottish**, **black** font indicates multiple associated ethnicities.

### Pinpointing the Paternal Ancestral Genetic Homeland

The method of using genetic 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. The link with the land is greatest among the farming community and since farmers in Scotland can still be found farming the land where their ancestor lived when he first inherited his surname, or where one's ancestor first settled within Scotland, one can plot where farmers with the surnames that appear in one's Y-DNA results concentrate and identify an area common to all. This means for example that upon Y-DNA testing a Robertson from Aberdeenshire will be a genetic match to people with surnames like Tarves, Fowlie and Barrack; surnames associated with Northeast Scotland. While in contrast a Robertson from Fife will have genetic matches to people called Pride, Pitcairn and Seath; surnames associated with East Central Scotland. Hence, it is the test subject's closest genetic surname matches which will reveal where his Scottish paternal ancestors originated. An examination of Mr Robinson's Y-DNA results reveals that the surnames MacKay, Campbell, MacDonald, MacFarlane, Moore(Muir), Buchanan, MacAuslan and MacPherson appeared as his closest and most frequent recurring Scottish surname matches, see **Figure 2**. Distribution mapping of farmers called MacKay, Campbell, MacDonald, MacFarlane, Muir, Buchanan, MacAuslan and MacPherson reveals that

they are common surnames associated with multiple locations but that they crucially occur in closest proximity to one another in West Central Scotland, see **Figure 3**.



**Figure 3:** The test subject's closest genetically recurring surname matches reveal a paternal ancestral link with West Central Scotland. Distribution mapping of the MacKay, Campbell, MacDonald, MacFarlane, Muir (Moore), Buchanan, MacAuslan and MacPherson farming communities reveals that they are all associated with West Central Scotland (red broken circle). Each surname has been placed on the map in the area where farmers with that surname concentrated in early census data.

The Scottish Origenes Surnames and DNA Map of Scotland details where farmers with each of the estimated 4000 different Scottish surnames concentrated in early census data. An examination of the area northwest of Glasgow City as it appears on the Scottish Origenes Surnames map reveals many of the surnames that appear among the test subject's closest recurring genetic matches found within Stirlingshire and bordering Perthshire and Dunbartonshire, see **Figure 4**. Farmers called MacKay and Campbells (surnames which appear as the test subject's closest recurring genetic matches) concentrate within neighbouring Dunbartonshire and Stirlingshire, and between these one finds many of the surnames that appear among the test subject's closest genetic matches, see **Figure 4**. The DNA results indicate a paternal

ancestral link with the area surrounding the southern shores of Loch Lomond dating from approximately 1000 years ago.



**Figure 4:** The Surnames of Stirlingshire and Dunbartonshire. An examination of neighbouring Stirlingshire and Dunbartonshire reveals the Campbells and MacKays (red arrows) who appear as the test subject's closest genetic relatives. Between the Campbells and MacKays one finds a number of other surnames that appear among the test subject's (more distant) recurring genetic matches (orange arrows). These genetically matching surnames arose among a tribal group of related males living along the southern shore of Loch Lomond an estimated 1000 years ago. Each surname has been placed on the map where farmers with that surname concentrated in early census data. Surnames in red font (like MacAuslan) are associated with a single geographical area within Scotland.

### The Clan Territories of Northwest Central Scotland

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. 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. An examination of the castles and towerhouses of Stirlingshire and bordering Dunbartonshire and Perthshire reveals a mix of Clans and Families of predominantly Picto-Gael and Norman origin, see **Figure 5**. Strikingly, almost all of the Clans of Picto-Gaelic origin that dominated the Highlands of Northwest Central Scotland feature prominently among the test subject's closest genetic relatives, see **Figure 2 and 5**.

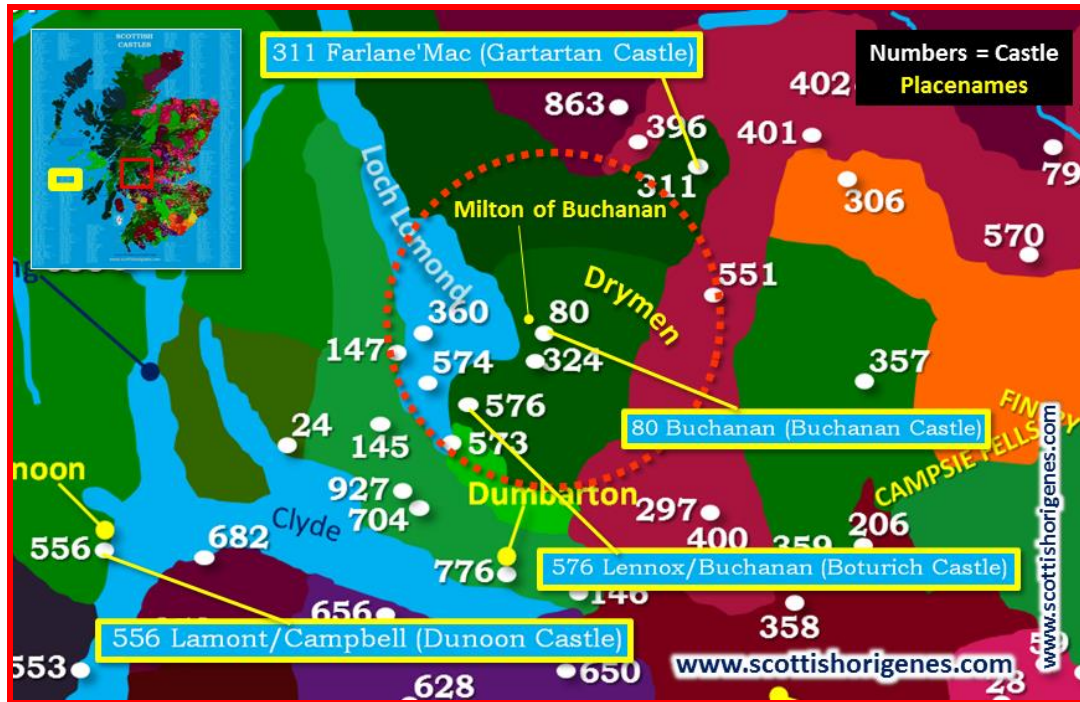


**Figure 5:** The principal Medieval Clans and Families of Northwest Central Scotland. An examination of Argyllshire, Stirlingshire and Perthshire in the Western Highlands of Scotland reveals an area dominated by Picto-Gaelic Clans and Norman Families, many of whom (red arrows) appear among the test subject's closest and most frequent genetic relatives. The test subject's paternal ancestor was of Picto-Gaelic ancestry and lived in Northwest Stirlingshire approximately 1000 years ago.

### Mr Robinson's Paternal Ancestral Genetic Homeland

An examination of the farming communities within the parishes that lay along the southern shore of Loch Lomond it revealed many with the surnames that appear in the test subject's genetic matches within the parish of Drymen, and it is there that the test subject's paternal ancestral genetic homeland is to be found, see **Figure 6** and **7**. It was there that one finds farmers with surnames like Campbell, MacKay, Buchanan, MacFarlane, MacLaren, Muir and Stewart in early census data, and it was there that the test subject's direct male ancestor lived when surnames first appeared in Scotland an estimated 1000 years ago. An examination of early census data also reveals Robbs, Roberts, Robins, Robison and Robertsons farmers within Stirlingshire and bordering Perthshire and Dunbartonshire, and hence it is quite possible that the test's paternal ancestor acquired the Robinson surname within Drymen parish approximately 450 years ago.

When one's ancestors have been associated with an area for long enough one will often find evidence of their long historical links with that location in the monuments and placenames one finds there. An examination of the southern shores of Loch Lomond reveals Campbell, MacFarlane and Buchanan castles and placenames, see **Figure 6**. The test subject's paternal genetic relatives will undoubtedly have left evidence of their long ancestral links with this area in the history of this location, but also in the DNA of the farmers who still live there.



**Figure 6:** Mr Robinson's Paternal Ancestral Genetic Homeland. An examination of early census data reveals that many of the surnames that appear among the test subject's closest genetic relatives occur within the parish of Drymen in Stirlingshire and it is there that the test subject's Paternal Ancestral Genetic Homeland (orange broken circle) is to be found. It was there that his paternal ancestor lived when paternally inherited surnames first appeared in Scotland. His paternal ancestors lived surrounded by relatives who inherited surnames like MacKay, Campbell, Buchanan, MacLaren, MacFarlane and Stewart. An examination of the surrounding area reveals castles and placenames associated with a number of the test subject's closest genetic relatives. The test subject's genetic relatives will also have left evidence of their long ancestral links with this area in its history, but also in the DNA of the current inhabitants.



**Figure 7:** View towards Drymen village from the Trossach Hills.

**How to confirm the Robinson Paternal Ancestral Genetic Homeland**

Confirmation that the test subject's paternal ancestor originated from Stirlingshire will require the recruitment of MacKay or Campbell farmers from Drymen parish for commercial ancestral Y-DNA testing.