

Walker

A Scottish Case Study

www.scottishorigenes.com



A stylized, handwritten signature in black ink.

Dr Tyrone Bowes
4th August 2012

'Walker' Case Study

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. 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 'Walker' (the Walker Adam) was living in close proximity to others with whom he was related but who assumed other surnames like Dalrymple, Stewart, and Kincaid. Given that 1,000 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.

Early 19th century census data showed that Scottish surnames could still be found concentrated in the County from which they originated. In this manner one can examine surname distribution maps and pinpoint a '**Genetic Homeland.**' The Genetic Homeland is the small area 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. The Case Study below will detail how I made sense of Mr Walker's DNA test results and will provide a checklist on how to proceed in identifying 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 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 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, 9th Century Viking raider, or 12th Century Norman your DNA results will reflect earlier English, Welsh and possibly Scandinavian origin. One must approach this process with an open mind!

‘Walker’ Case Study

Introduction

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 ‘Walker’ are shown in **Table 1**.

SURNAMES THAT REOCCUR AS A GENETIC MATCH TO TEST SUBJECT WALKER 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
Walker	Walker (x5)	no match	no match	Dalrymple (x2)	Paxman (x3) ¹	no match	Wilson (x2) Bledsoe (x2) ¹ Alexander (x2)	Stewart(x2) Lasater/Lassetter/Laster/Lassiter (x6) ² Kincaid/Kincead (x3)

Table 1: Reoccurring surname matches for test subject Walker. Surnames appear at the point at which they first occur as a genetic match e.g. the first match to another individual called Walker occurs at 37/37 markers, but not all Walker’s will match at the is level (note: only Walker’s who’s paper trail does not meet are counted). 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; **Scottish** and **English**. ¹These participants are most likely non-paternal events and the individuals testing are related as indicated by similar testing dates. ²These surnames are a variation of the Anglo-Saxon surname ‘Leicester.’

The test subject Mr Walker matches other ‘Walker’s’ which demonstrates that after an estimated 1000 years he has retained the surname of his founding ancestor (the Walker Adam so to speak), see **Table 1**. The majority of his reoccurring matches are also to notable Scottish surnames, but what is interesting is that these Scottish surnames are not of Celtic origin, that is to say they do not typically begin with Mc/Mac (meaning ‘son of’). There are also some matches to English surnames, two of which are most likely non-paternal in origin, while the surname ‘Leicester’ associated only with England may hold a clue as to the earlier origins of Mr Walker ancestors prior to the emergence of surnames in the 10th Century.

The initial observation of a Scottish association at the time when surnames became common is also evident from the surname distribution maps in **Figure 1**. What is also evident from these 1881 distribution maps is that Walker is associated with multiple locations, which implies multiple founding ancestors, or a number of different unrelated Walker ‘Adam’s.’ This would fit with origin of the Walker surname, which is described as a locational name when found in England (from the town of Walker in Northumberland) an occupational name when found in Scotland (someone who thins cloth by walking on it) but also as a putative Viking surname referring to someone who lived ‘by the wall of the Marsh.’

'Walker' Case Study

WHERE DO THE SURNAMES THAT OCCUR AS THE CLOSEST GENETIC MATCHES ORIGINATE?

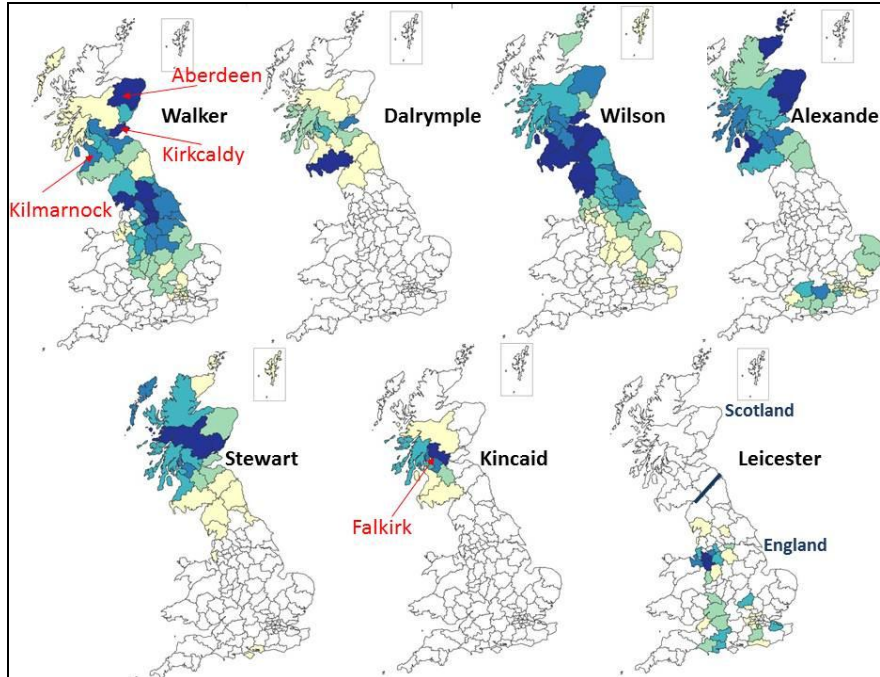


Figure 1: 1881 Surname distribution mapping of the reoccurring surnames as revealed by Mr Walker's ancestral DNA test. There is a clear association with six of the seven surnames with Scotland. Within Scotland, Walker is associated with 3 geographical areas; Aberdeen in the northeast, Kirkcaldy in the central belt, and Kilmarnock in the southwest. The surname Kincaid is unique, it being the only surname associated with a single geographical area (Falkirk). Interestingly Walker, Wilson, Leicester, and Alexander are found in England which may hold clues as to Mr Walker's ancestral origins prior to the advent of surnames.

The method of using reoccurring surname matches as revealed by commercial ancestral Y-DNA testing to pinpoint a Genetic Homeland works by exploiting the link between the Y chromosome, surname, and land which are typically passed from father to son. In the absence of a link to the land the process will fail. Hence one must examine whether the Walker's, whose surname has an occupational origin had a link to the land. 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.

Walker is a common surname in Scotland and in 1841 there was a large Walker farming community distributed in 3 separate distinct locations; Aberdeenshire in the northeast, Dunbartonshire/Stirlingshire in the Scottish central belt, and in Kirkcudbrightshire in the southwest, see **Figure 2**. These distributions in 1841 are similar to the distribution in 1881 (Figure 1). The test subject Walkers Genetic Homeland will be found within one of these geographical areas. To find out which geographical area one must examine where his reoccurring surname matches in Table 1 overlap in their distribution with the Walker's.

'Walker' Case Study

WHERE DOES THE SURNAME WALKER ORIGINATE WHEN FOUND IN SCOTLAND?

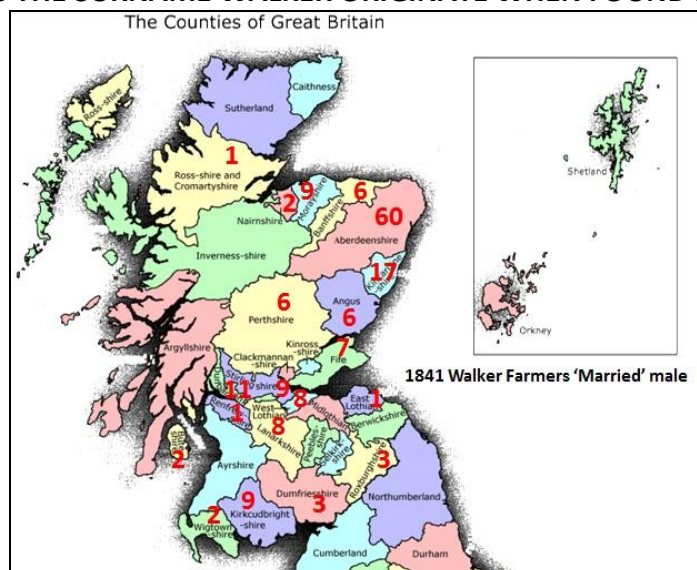


Figure 2: The Walker Farming community in 1841. Figures in each county represent the number of married Farmers with the Walker surname. These Farmers cluster in 3 areas; Aberdeenshire in the northeast, Dunbartonshire/Stirlingshire in the central belt, and Kirkcudbrightshire in the southwest and represent 3 different possible geographical origins for the test subject Walker's ancestors.

The analysis is not helped by the fact that the surnames Alexander, Stewart, and Wilson are all very common Scottish surnames and that in each case only 2 individuals (with each of these surnames) match Mr Walker. These numbers are low and the commonality of these surnames makes any inferred geographical link unreliable. In contrast the surname Dalrymple is rare, but it is associated with 2 geographically distant locations; Dumfriesshire and Galloway in the southwest and Fife in the east, both of which are areas associated with populations of Walkers.

The Kincaid's

The remaining surname 'Kincaid' is notable for 3 reasons. Firstly at the 25 marker level there are 3 individuals with this surname that appear as a genetic link (it is the only Scottish surname to have more than 2 individual matches to Mr Walker). Secondly, Kincaid is a topographical surname, named after a single specific place in Scotland. Lastly, the DNA analysis of the Kincaid's demonstrates that there was a single founding ancestor for the Kincaid Clan.

The Kincaid's in Scotland are associated therefore with a single founding ancestor and a single geographical location. If the shared ancestry between the Walker's and Kincaid's can be conclusively established then the test subjects Genetic Homeland will be found in the area where the Kincaid's and Walker farming populations coexisted in early census data. However, close examination of the Kincaid Family Tree DNA project reveals that there are over 180 Kincaid's who have had a DNA test. Mr Walker matches only 3 of these individuals at the 25 Marker level, which initially led to the conclusion that the relationship to the Kincaid's was coincidental and the result of a non-paternal event. Closer inspection at the 12 marker level revealed over 70 individuals with the surname Kincaid or its spelling variation with a shared

'Walker' Case Study

ancestry with Mr Walker. The Kincaid's and the test subjects Walker's founding ancestors shared common ancestry.

The Walker Genetic Homeland

In 1841 the Kincaid farming community was found near 'Kincaid' from which this Clan took its name, but also in Falkirk and Polmont parishes, both of which are situated in the central belt of Scotland, see **Figure 3**. By the 16th Century the Kincaid's are recorded in Falkirk and Linlithgow and the presence of the Kincaid's in Falkirk and Polmont in the 19th century reflects this historical association. Similarly the Stirlingshire/West Lothian Walker's cluster within a similar area and overlap with the Kincaid's in the parishes of Falkirk and Polmont. It is within these neighbouring parishes that the test subjects Walker Ancestors originate and where his Genetic Homeland lies.

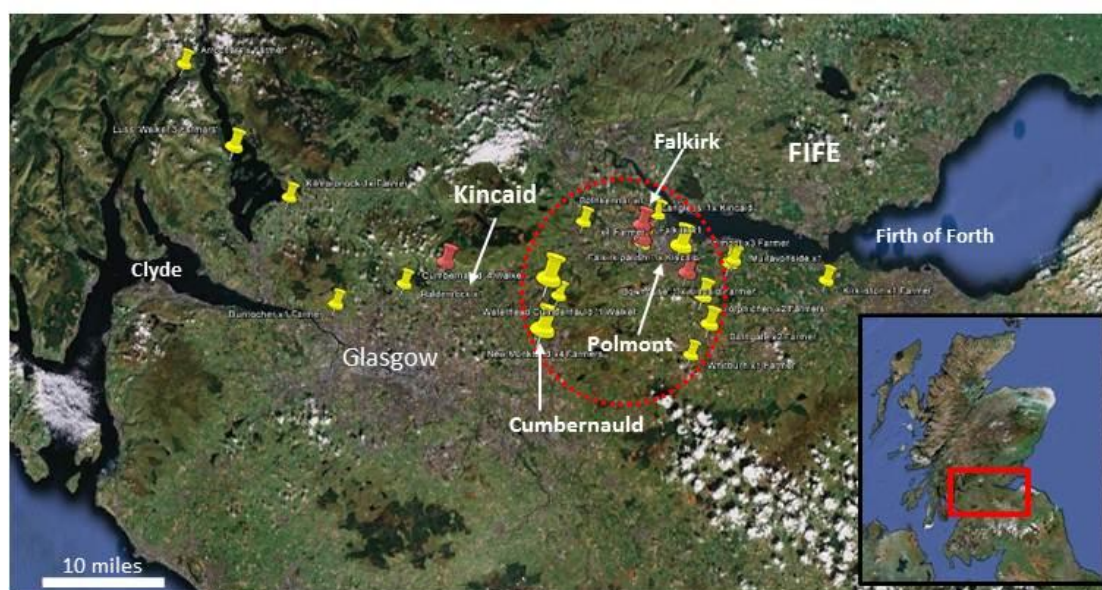


Figure 3: The test subjects 'Walker' Genetic Homeland is located in the neighbouring parishes of Falkirk and Polmont. In 1841 the Kincaid and Walker farming communities lay between the Clyde and Firth of Forth (red circle). Within this area both farming communities overlap within the parishes of Falkirk and Polmont.

The Walker Clan of Stirlingshire and West Lothian does not appear on the beautifully illustrated Scotland of Old map which details the Clan territories at the time of James the VI, see **Figure 4**. However their genetic relatives the Kincaid's can be found just north of the Stewart territory of Glasgow (the Stewart's appear as a Walker genetic match in Table 1). Similarly surrounding this area one finds Clans with surnames that appear as genetic matches to the test subject Walker including; Weir, Hamilton, Buchanan and Moubray (Mabry). The concentrations of genetically-matching surnames (both paternal and non-paternal) only within this area are representative of Mr Walker's long ancestral association with this locality.

A historical association of a particular Clan or Family with an area is often reflected in the place names of that area. However in this instance any association is problematic given the location of Mr Walker's Genetic Homeland within the heavily industrialised

'Walker' Case Study

and urbanised central belt of Scotland which accounts for 70% of Scotland's population. Local place-names have disappeared as massive urbanisation has swallowed up a once rural environment. But with this in mind one does find references to the Kincaid's with Kincaid's fields and Kincaid House Hotel near Campsie in the Kincaid's ancient Clan territory. The nearest reference to the Walker's is a Walker street in Kincardine opposite Falkirk in Fife, see **Figure 5**.



Figure 4: The Kincaid's in the 16th Century Clan map of Scotland. The Kincaid Clan (**large red arrow**) were associated with an area near Cambuslang between Falkirk and Glasgow (white arrows) and bordered by the Clyde to the south and Firth of Forth to the north. The surrounding area of Glasgith was associated with the Stewart's (**small red arrow**) who reoccur as genetic matches in Table 1, and also with the Hamilton's who reoccur as genetic matches at the 12 marker level. Other Clans that occur as genetic matches include Weir, Mabry, and Buchanan (**purple arrows**).

Anglo-Saxon or Ancient Briton?

A thousand years ago Scotland was a diverse nation consisting of Scots, Picts, Britons, Scandinavians, Angles, and Normans who by the 11th Century seem to have laid aside their own versions of the past and adopted as their own the royal-line, history, and mythology of the Scots. The DNA results provide clues to Mr Walker's ancestors within this eclectic mix. The near complete absence of surnames beginning with Mac/Mc rules out a Highlander Scottish origin. One can also rule out Viking and Norman ancestry given the lack of associated surnames. This leaves the lowlander Scots consisting of the ancient Britons of Strathclyde and the Angles in the east. Both of whom would have had earlier ancestral links with England which is evident in the association of some of the genetic matches with England. Anglo-Saxon ancestry is further supported by both the position of Mr Walker's Genetic Homeland in the territory of the Angles (**Figure 6**) but also in the Haplotype of Mr Walker.

'Walker' Case Study

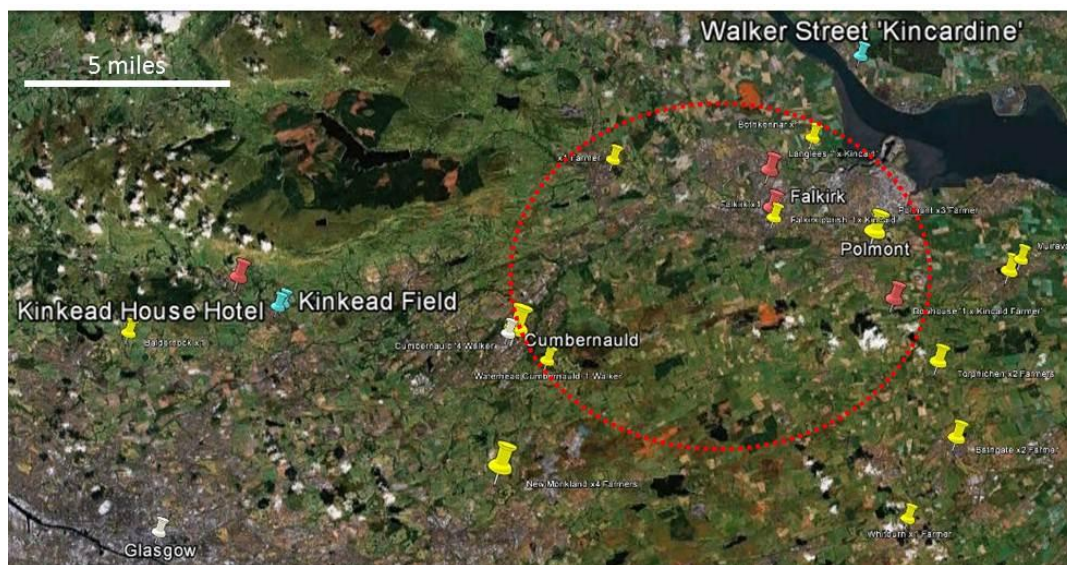


Figure 5 Place-names associated with Walkers and Kincaid near the Walker Genetic Homeland.

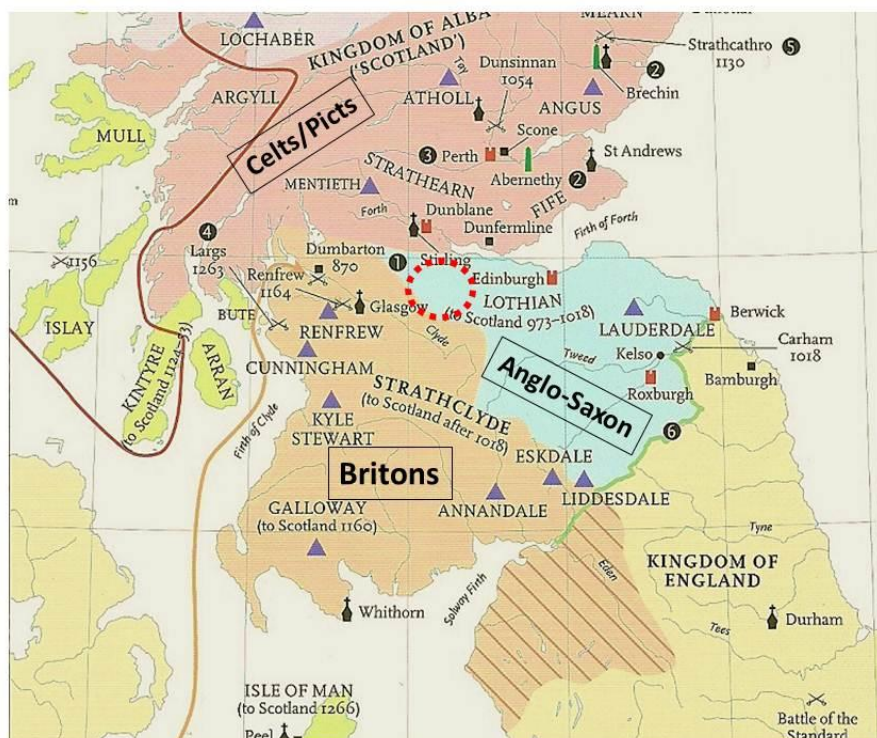


Figure 6 The 10th Century lands of Scotland at the time when surnames became common. The Genetic Homeland of the test subject Walker (red broken circle) falls within the area traditionally associated with the Angles. This image is taken from The Historical Atlas of the Celtic World.

How to confirm the Walker Genetic Homeland

Confirmation of the Genetic Homeland would usually require the DNA testing of farmers with the Walker surname currently living in Falkirk and Polmont area. This may prove very difficult given the urbanisation of the area. However humans tend to

www.irishorigenes.com
www.scottishorigenes.com
www.englishorigenes.com

'Walker' Case Study

migrate to the nearest towns and cities and hence DNA testing within the towns of Falkirk and Polmont may provide the conclusive proof.

**HAVE YOU HAD A Y-DNA TEST? THEN 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 80% success rate. If in the unlikely event that I cannot pinpoint your Genetic Homeland I will explain why and I will not charge you.

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 [Scottish Origenes homepage](#).
2. PublicProfiler World names database.
3. Census data (earlier the better).
4. Google Earth.
5. Scotland of Old, Clan Names Map.