Clan Donnachaidh DNA report – extracts from newsletters in 2007

2006 was a very exciting year for the Clan Donnachaidh DNA surname project. It grew by almost 100 participants and it is providing an impressive amount of information together with the advances in DNA research.

Results to date

At the time of writing (mid-January 2007) we have 246 sets of results representing a number of surnames and a wide range of results. There are now nearly 300 people who have enrolled. There is no predominant result that can be said to represent the clan or even one of the surnames within the clan.

Among these results we have

138 different 12-marker haplotypes
157 different 25-marker haplotypes
136 different 37-marker haplotypes

However, the results are starting to coalesce. There are eight Duncan subgroups, one Reid subgroup, six Robertson subgroups and some larger Robertson and Reid groupings of similar haplotypes.

Some dedicated testing by people researching the name Duncan in the United States has produced some excellent matches that confirm documentary family research (though in one case an anomaly has been discovered).

Some Robertson families have been working along similar lines (Groups C and D and probably some of the others). We should be interested to have reports, which could be helpful to other participants.

By selective testing, the Duncan researchers have been able to identify which Duncan families that settled in the United States have a common origin. It has proved possible to link many of them, though the name and location of the common ancestor is still unknown.

Using DNA results to help in genealogical research

At the Clan Donnachaidh gathering at the beginning of October 2006, Tim Duncan, one of the project administrators, explained how he had used the DNA results to confirm documentary research. The basic principles as described by Tim are set out here, with an example of how they have been put into effect.

Certain basic principles are involved in genetic genealogy

- It looks at a timeframe over the period of surname development.
- Follows lineages by SURNAME
- Uses the Y-DNA test for male research

Results for the surname Duncan

- The Duncan participants are coalescing into eight defined subgroups.
- Over 20 men do not yet have DNA matches.
- The DNA results show that the Duncan surname developed along different male lines over the period of surname development.

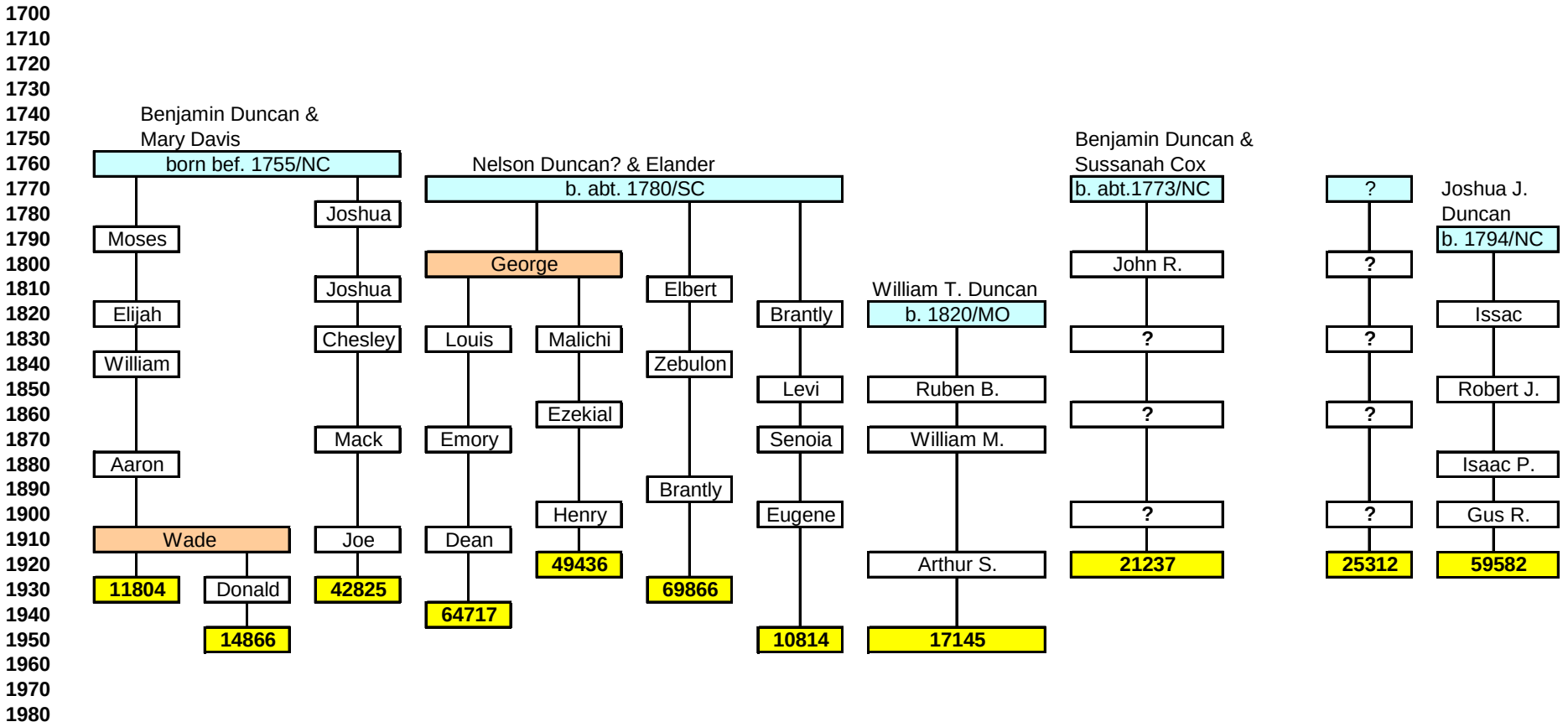
Duncan Group A is taken as an example. The results for 25 markers are shown below. It will be noted that, with a few variations, the results are very similar. This is the sort of result that is expected if the people concerned share a common ancestor within an historical timeframe. One interesting feature is that some members of this group have an additional marker at 464e.

Duncan Group A with 25-marker results

# of Duncans tested	Group	# in group	Kit #	Haplogroup - SNP	393	390	19	391	385a	385b	426	388	439	389-1	392	389-2	458	459a	459b	455	454	447	437	448	449	464a	464b	464c	464d	464e
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	25e
					13	**24**	**14**	**10**	**11**	**14**	**12**	**12**	**13**	**13**	**14**	**29**	**17**	**9**	**10**	**11**	**12**	**25**	**15**	**19**	**29**	**14**	**15**	**16**	**17**	**17**
1	A	1	*10814*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	***15***	***15***	*17*
2		2	*11804*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	16	***16***	*17*
3		3	*14866*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	16	17	
4		4	*17145*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	16	17	
5		5	*21237*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	***11***	*25*	*15*	*19*	***30***	*14*	***14***	***17***	*17*	
6		6	*25312*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	***24***	*15*	*19*	*29*	*14*	*15*	16	***16***	*17*
7		7	*42825*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	*16*	***16***	*17*
8		8	*49436*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	16	*17*	
9		9	*59582*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	16	*17*	
10		10	*64717*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	16	*17*	
11		11	*69866*	*R1b1c*	*13*	*24*	*14*	*10*	*11*	*14*	*12*	*12*	*13*	*13*	*14*	*29*	*17*	*9*	*10*	*11*	*12*	*25*	*15*	*19*	*29*	*14*	*15*	16	*17*	

Through documentary research, the participants had traced their ancestry back to six different men. It was not known how these men were related.

Duncan Group A



Legend:

- Test subjects with a confirmed positive Y-DNA match
- Test subjects with first level common ancestor
- Male ancestors for each test subject
- Oldest known ancestor for each test subject

Notes:

Test subject #21237 has not signed his release form thus we know nothing about him

Chart by Tim Duncan

2 February 2007

Duncans in Walton County, Georgia

Genealogical question:

- Were the Duncan men living in Walton Co., Georgia during the time period 1820-1860 related?
  - Do they share a common ancestor?

- Genealogical research has built a strong circumstantial case, though no documentary proof has been found, that George, Anderson Elbert and Brantly Duncan were brothers and the son of Nelson Duncan.

How can DNA testing help?

- By testing male descendants from each known Duncan line from Walton Co., Georgia, this will give a biological 'fingerprint' of each participant's DNA.
- This DNA 'fingerprint' is called a haplotype.
- Compare the DNA test results from each descendant.
- Look for near identical DNA haplotype/signature.

Results of Walton Co., Georgia DNA testing:

- DNA testing shows that the male descendants of George, Anderson Elbert, and Brantly Duncan are indeed biologically related.
- DNA results show that these men share a common male ancestor.
- DNA validates the genealogical research that has been amassed on these Duncans.

With genetic testing, researchers had proof that all these lines were related, although documentary proof has not yet come to light.

Duncan researchers in the United States have tested a number of Duncan lines to see whether they are related. In many cases a relationship has been demonstrated, though it is not always known how and when the relationship occurred.

Using genetic testing for your family research

If you are interested in using DNA testing for family research:

- Seek out men from families with the same surname who seem likely to be related to you (e.g. they come from the area historically associated with your family or they have other characteristics in common with your family, such as the same unusual forenames).
- If you have already compiled a family tree, it could be useful to test different branches to obtain a collection of results to define the ancestral haplotype.
- If not much money is available for testing, choose a 12-marker test to assess families that may be related. This will indicate whether there is likely to be a close relationship or not. An upgrade can always be ordered later if the results look interesting.

A large number of different haplotypes have emerged from the testing to date. Groups are starting to emerge. However, as yet we almost certainly do not have results from all lineages for all the surnames. If you are interested in using DNA results for genealogical research, we would encourage you, where possible, to identify families who are likely to be related to your family and approach them about testing.

Making the most of your results in other ways

Don't forget to keep your contact details up to date. If you move or change your e-mail address, remember to correct your page on the FTDNA site.

You can help genetic research in general by uploading your results to the Y-search site. You can do this from your Y-DNA matches page, where you will find the link under the following text.

Additional possibilities for searching matches:
While our database is not open to the wide public for privacy reasons, Family Tree DNA has created Ysearch.org as a free public service so that people who have tested with the different companies can compare their results. You will be able to determine what portion of your personal information you want to disclose. Please note that a new user ID will be created for you and you will be asked to choose a new password. This new set of ID/Password is exclusive for Ysearch.org. You will also be given the opportunity to upload your GEDCOM if you have one.

Testing in Scotland
We are exploring ways of getting more results from known locations in Scotland. Plans are afoot to write an article for one of the local papers in Perthshire, approach some of the local family history societies to discover people with documented genealogies and put some information leaflets in the Clan Donnachaidh Centre at Bruar in Perthshire.

This will start in Perthshire, but will spread out to adjacent counties.

We need to recruit more participants from Scotland and Ireland, particularly participants with known genealogies, to provide a basis for comparison of results.

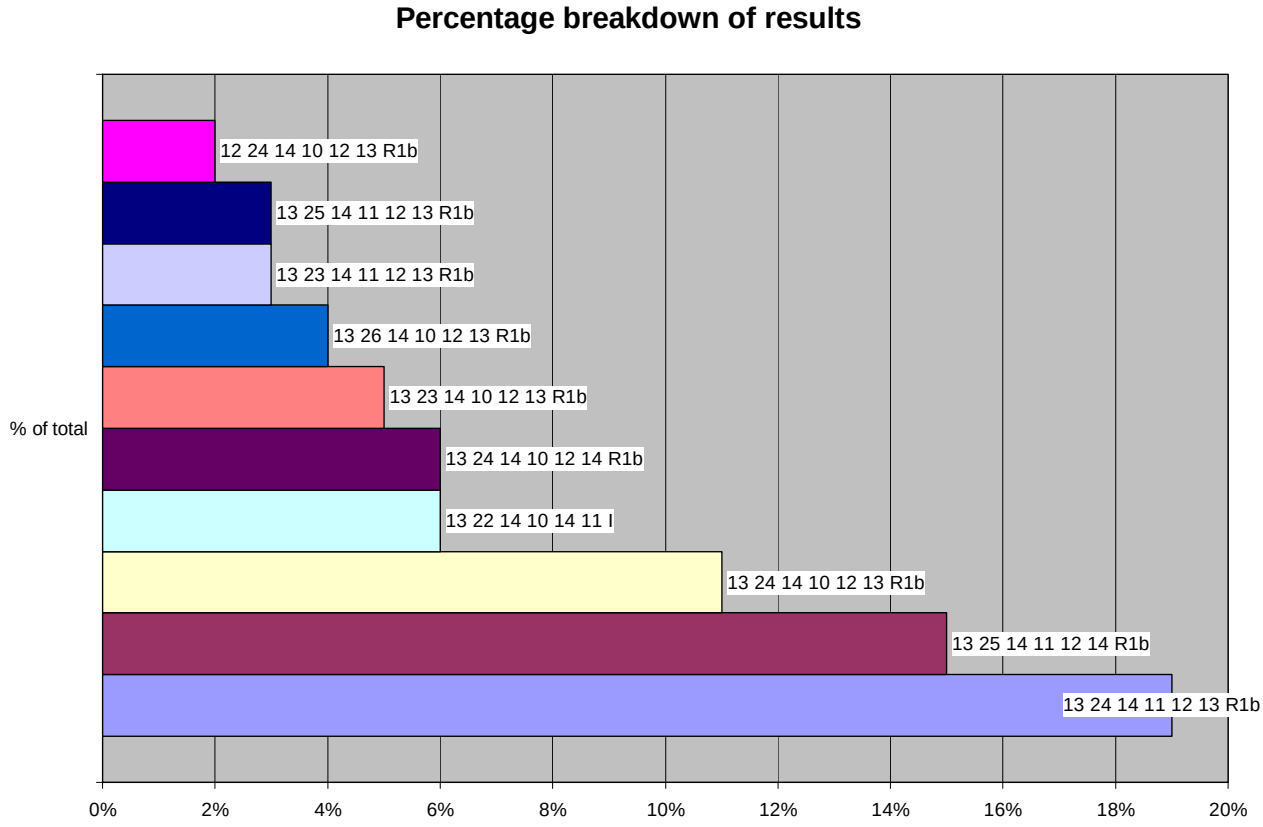
Tim Duncan has drawn up charts similar to the Duncan Group A chart (on page 3) for some of the other groups and he plans to complete charts for all the groups.

An overview of the results
As has been stated earlier, most Clan Donnachaidh results fall into Haplogroup R1b. This is the most common haplogroup in western European populations. It is believed to have expanded throughout Europe as humans recolonized after the last Ice Age. The latest research suggests that humans returned to Britain only about 11 500 years ago; the first arrivals almost certainly belonged to certain categories of Haplogroup R1b.

We also have quite a number of results in Haplogroup I. Haplogroup I spreads up through central Europe and represents about 10-15% of men in north-western Europe. We also have one or two sets of results in Haplogroups R1a, E and J.

Within the R1b results most Clan Donnachaidh participants come into certain broad categories. When defined by six markers the main categories are:

Principal clan surnames associated with haplotype	*Haplo-group*	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*	*% of total*
Duncan, Duncanson, Reid, Roberts, Robertson, Stark	R1b	13	24	14	11	12	13	19%
Duncan, Reid, Robertson	R1b	13	25	14	11	12	14	15%
Donachie, Duncan, Duncanson, Inches, Reid, Roberts, Robertson, Stark	R1b	13	24	14	10	12	13	11%
Reid, Robertson	I	13	22	14	10	14	11	6%
Duncan, Robertson	R1b	13	24	14	10	12	14	6%
Duncan, Reed, Robertson, Stark	R1b	13	23	14	10	12	13	5%
Duncan	R1b	13	26	14	10	12	13	4%
Reid, Robertson	R1b	13	23	14	11	12	13	3%
Reid, Robertson	R1b	13	25	14	11	12	13	3%
Duncan, Reid, Robertson	R1b	12	24	14	10	12	13	2%



It will be seen that, even at six markers, there is no haplotype that represents the majority of the clan results. Consequently, so far there is no evidence of a genetic profile that represents a typical Duncan, Reid or Robertson. The highest number of results is found in the 13 24 14 11 12 13 category, which is the category that occurs most frequently in Britain and probably represents the earliest settlers.

Matches with other surnames (on 37 and 67 markers)
Most participants will have noticed, if they have asked for notification of matches with all surnames, that they have achieved fairly close matches with other surnames on 12 and 25 markers. There are some who have matches with other surnames at 37 and in a few cases even 67 markers.

What do these matches with other surnames mean?

So far all the 37 and 67 matches occur among participants who come into certain categories of very frequently occurring haplotypes. They will be identified below, when the principal haplotypes are discussed in detail.

Trying to identify origins from matches with other surnames
Family Tree DNA points out in a section on *Understanding matches with different surnames*:

The range of generations for the common ancestor extends to 76.9 generations, or almost 2000 years for those cases where there is not a surname in common. Therefore the importance of a surname link is paramount to provide a comfortable conclusion of relatedness. Most of the time random matches with people with different surnames do not stand the test for extended DNA testing.

However, many participants will have noticed that their surname matches seem to come from particular areas (perhaps a number of Scottish or a number of Irish results) so there will be some interest in identifying the focal points of these surnames.

Surname maps
You can study the distribution of your own name and other names by making use of the surname maps that are now available on the Internet. A useful set of maps for Great Britain can be found on the Surname Profiler site:

http://www.spatial-literacy.org/UCLnames/

This was developed from a research project based at University College London.

If you click on *Start a surname search* at the top of the home page, you can see how the distribution of a surname has developed by comparing results in 1881 and 1998. If you click on the *Geographical Location* or *Frequency and Ethnicity* headings, you can find more information about the surname.

There does not seem to be an easily accessible Internet option for Ireland at present. There is a site that lists the main Irish surnames by county and barony but does not provide maps
http://www.rootsweb.com/~irlkik/ihm/

For charting the spread of names in the USA, the Hamrick site is easily available:
http://www.hamrick.com/names/index.html

No matches (even on 12 markers)
At the other end of the spectrum, some people have no matches, even at 12 markers.

Those concerned tend to have more unusual results in that it is not possible to identify the haplogroup by analysing the haplotype. They come into the categories of less common haplotypes, which registered only one or two occurrences even in a 2003 six-marker survey in Britain and Ireland (see below). There are no matches for these results in the Clan Donnachaidh project, even at six markers.

Finding relatives
If you have no matches or a lot of matches, it does not necessarily mean that it will be more difficult to find relatives if you are interested in using your results for genealogical research. In the case of people with very few matches it may be easier to identify them on fewer markers.

The crucial factor is to find people who are likely to be related to you.

Those who have a number of matches with a variety of surnames may have to test for more markers to obtain a clear indication of a relationship within an historical time period. Leaving aside matches with other surnames within identified groups, there has been almost no overlap between the surnames that feature in the various 37-marker matches.

Comparing the Clan Donnachaidh results with other results in Britain and Ireland
In May 2003 a team of scientists published the results of tests in 23 small towns in Great Britain among men whose paternal grandparents were born within a 20-mile radius of the central point[1]. These results were compared with similar samples from men in Norway (Bergen and Trondheim), Denmark together with neighbouring Schleswig-Holstein in Germany, the Basque country and two towns in Ireland. Castlerea in central Ireland was chosen because it had no known history of contact with Anglo-Saxon and Viking invaders. Rush, to the north of Dublin, is on the coast.

Because earlier research had indicated the similarity of Celtic and Basque Y chromosomes, the Basque samples were included to help provide a representation of the Y chromosome of the indigenous population of the British Isles. Similarly, the samples from northern Germany/Denmark and Norway were included to provide a comparison for groups whose ancestors came into Britain from the north and east.

Six markers were tested (DYS393, 390, 19, 391, 388, 392). The results provide an overview of the distribution of certain haplotypes in Britain. Even when only six markers are considered there is a marked variation in the frequency of results which is relevant when considering matches within the Clan Donnachaidh results, particularly with other surnames.

The most frequently occurring Clan Donnachaidh results have been compared with the results of this survey. Charts have been drawn up for the six-marker haplotypes concerned on the basis of the 2003 survey results, showing the percentage of the total sample in the particular localities.

The 2003 survey was based on sampling and **you cannot assume that your ancestors originated in any of the localities concerned just because there is a high frequency of matches with the sample. It is**

[1] *A Y Chromosome Census of the British Isles. Current Biology, Volume 13, Issue 11, Pages 979-984, May 2003, C. Capelli, N. Redhead, J. Abernethy, F. Gratrix, J. Wilson, T. Moen, T. Hervig, M. Richards, M. Stumpf, P. Underhill* (http://www.ucl.ac.uk/tcga/tcgapdf/capelli-CB-03.pdf).

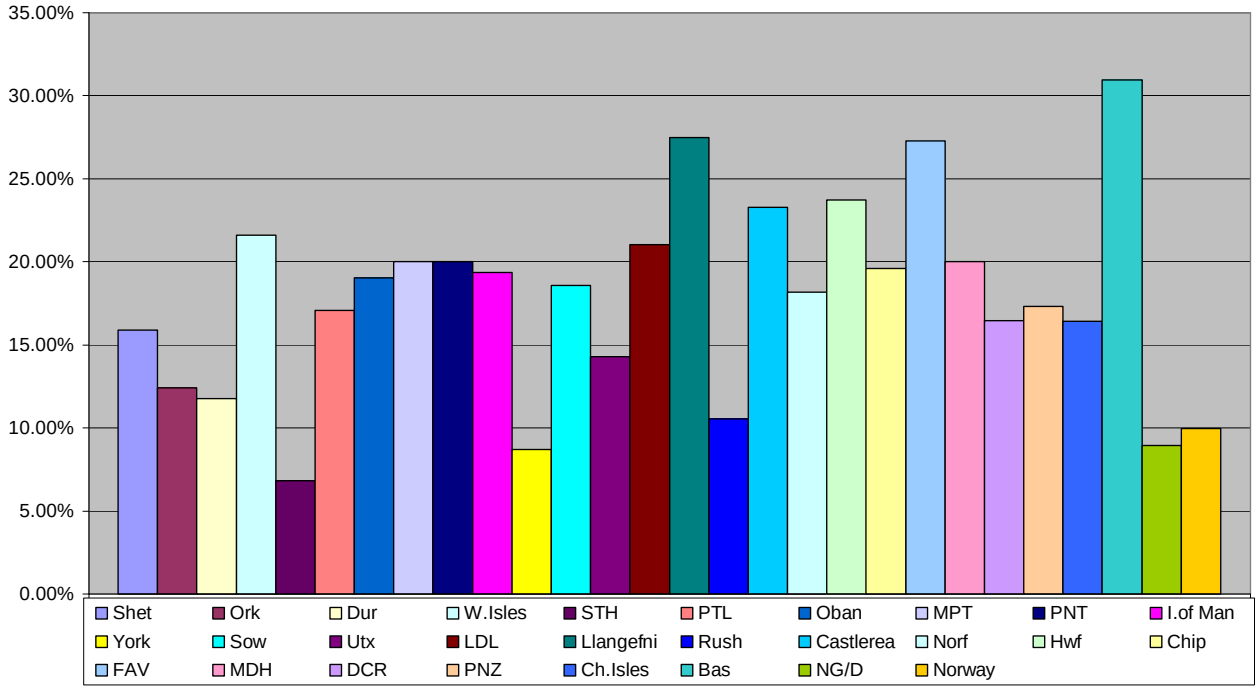
also important to realize that these haplotypes may occur in other localities. Nevertheless in some cases the sample results may help focus searches and there is some interest in seeing how certain haplotypes can be found throughout Britain whereas others are much more localized.

The places where samples were taken are listed below, with their abbreviations

Code	*Sample*
Shet	**Shetland**
Ork	**Orkney**
Dur	**Durness**
W.Isles	**Western Isles**
STH	**Stonehaven**
PTL	**Pitlochry**
Oban	**Oban**
MPT	**Morpeth**
PNT	**Penrith**
I.of Man	**Isle of Man**
York	**York**
Sow	**Southwell**
Utx	**Uttoxeter**
LDL	**Llanidloes**

Code	*Sample*
Llangefni	**Llangefni**
Rush	**Rush**
Castlerea	**Castlerea**
Norf	**Norfolk**
Hwf	**Haverfordwest**
Chip	**Chippenham**
FAV	**Faversham**
MDH	**Midhurst**
DCR	**Dorchester**
PNZ	**Cornwall**
Ch.Isles	**Channel Islands**
Bas	**Basques**
NG/D	**Germany/Denmark**
Norway	**Norway**

13 24 14 11 12 13 – Haplogroup R1b
Duncan H; Reid 13 24 14 11 (most); Robertson 13 24 14 11 (most); Duncanson; Roberts (most); Stark A



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
R1b	13	24	14	11	12	13

Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

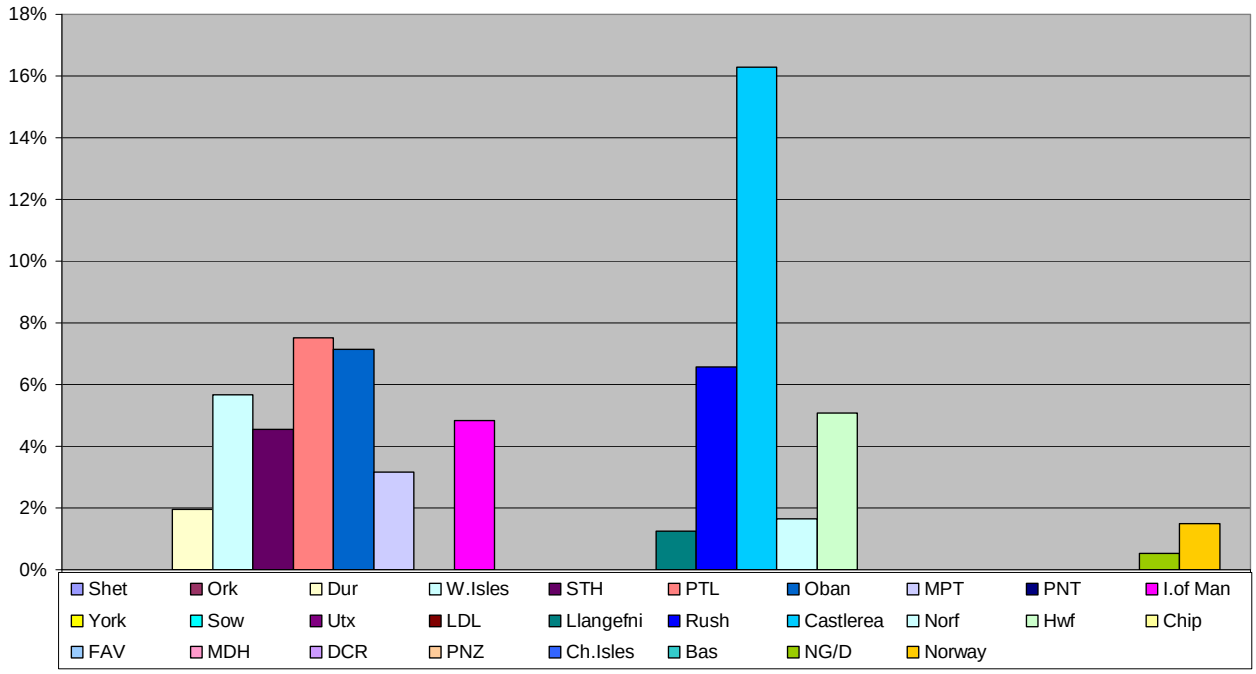
This category represents 18% of the total sample population in Britain and Ireland, 7% of the population in its lowest occurrence, rising to 20% and over in several areas of Britain. The result of the sample in the Basque country was over 30%. This category includes the short form of the Atlantic Modal Haplotype, which represents 2% of the men in western Europe.

The percentage of the total within the Clan Donnachaidh project is slightly higher, representing 19% of the results and a number of surnames.

Some members of this category have several 37-marker matches with other surnames. In some cases these matches are obviously Scottish names such as Maclean and Sinclair, others seem to be associated with other areas of Britain and even beyond. The chart shows that variations of this haplotype occur throughout Britain.

Curiously, other members of this category so far have no 37-marker matches, although the six-marker matches are well represented throughout Britain and it is much the most numerous of the six-marker categories, both in the Clan Donnachaidh project and in the population as a whole. Variations of this haplotype occur in very high frequencies throughout western Europe. Several participants who have Family Tree DNA Western Atlantic Modal Haplotype badges have no 37-marker matches with other surnames. A smaller number of WAMH participants do have 37-marker matches with other surnames. More analysis is required to see whether the 37-marker matches with other surnames fall into well-defined categories.

13 25 14 11 12 14 – Haplogroup R1b
Niall of the Nine Hostages, Duncan B & E, some Reids; Robertson B



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
R1b	13	25	14	11	12	14

Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

This category covers people who match the Niall of the Nine Hostages haplotype and others who come close. It will be noted that the results from Castlerea in Ireland are strikingly high, whereas this combination was absent from the Basque sample and was found at only very low frequencies in northern Germany/Denmark and Norway.

The combination DYS390/391 = 25/11, particularly when combined with certain other markers, has been noted as being strongly associated with Ireland.

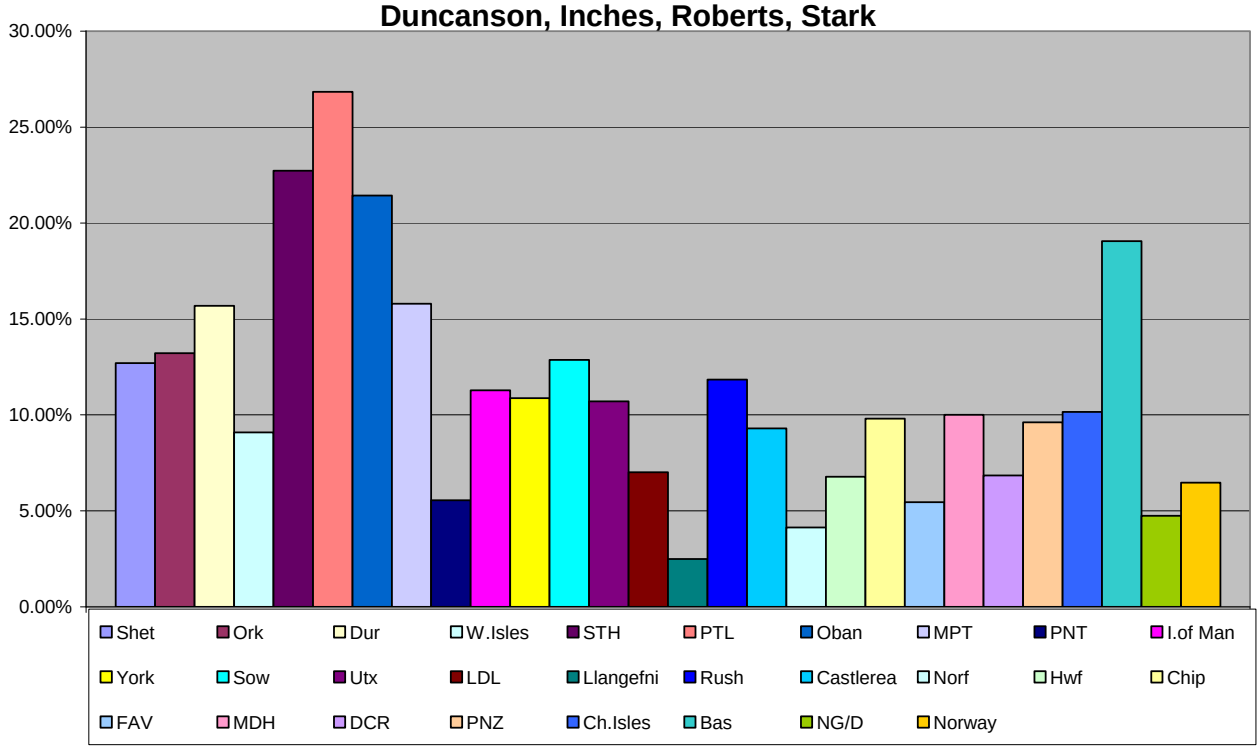
It will be noted that this category is not found throughout Britain and, outside Ireland, it is most strongly represented at between 4 and 8% in the Western Isles, Stonehaven, Pitlochry and Oban, also in the Isle of Man and Haverfordwest.

Within the Clan Donnachaidh results, this category has a number of 37-marker matches with other surnames, many Irish.

The proportion of participants who come into this category in the Clan Donnachaidh results is substantially higher than in the total sample population (15% of the Clan Donnachaidh result but only 2% of the total sample in Britain and Ireland). Robertsons, Reids and Duncans are all found in this category.

It will be interesting to see whether it appears to have a wider significance in the formation of the clan.

13 24 14 10 12 13 – Haplogroup R1b
Duncan D; Reid 13 24 14 10; Robertson 13 24 14 10 (most), Donachie, Duncanson, Inches, Roberts, Stark



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
R1b	13	24	14	10	12	13

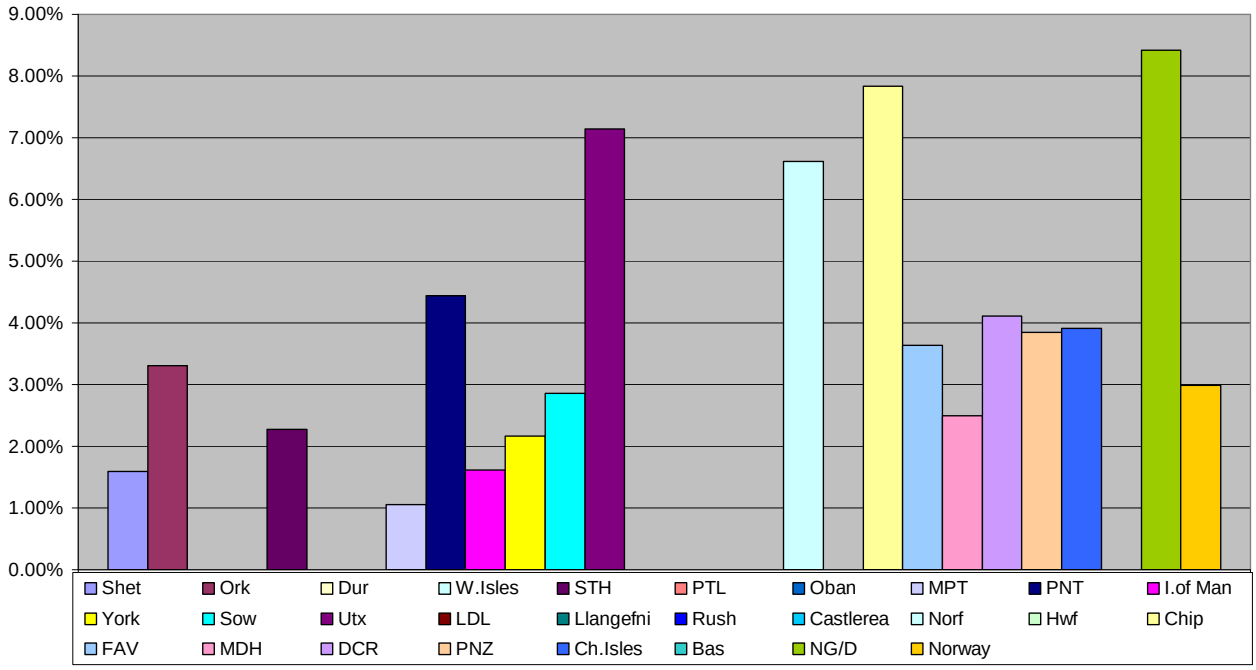
Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

Proportions in the sample taken in Britain and Ireland and in the Clan Donnachaidh project are identical at 11%

Within the Clan Donnachaidh results, members of this category have quite numerous 37-marker matches with other surnames. The matches are with various different surnames but they include a number of specifically Scottish surnames such as MacGregor, Ferguson, Buchanan.

It will be noted that the six-marker result represents over 25% of the sample taken in Pitlochry and over 20% of the sample taken in Stonehaven and Oban.

13 22 14 10 14 11 – Haplogroup I
Reid I (some); Robertson I (most); Robertson E & F



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
I	13	22	14	10	14	11

Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

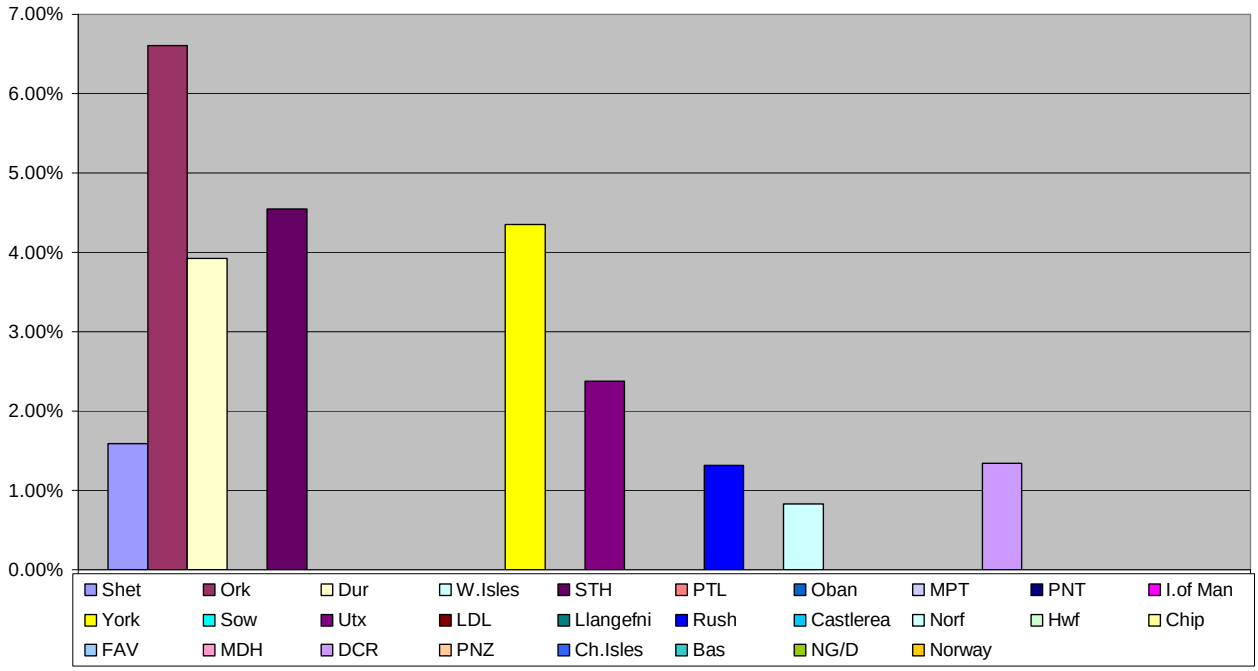
Haplogroup I is represented in about 12% of the Clan Donnachaidh results. It has been associated with origins in Denmark and the adjacent area of Germany. In the Scottish sample it was found particularly in Orkney and Stonehaven, which perhaps is not surprising. It was absent from the Basque and Irish samples.

The 13 22 14 10 14 11 haplotype represented 3% of the total survey results in Britain and Ireland and 6% of the Clan Donnachaidh results.

The peaks in Scotland in the 2003 survey were in Orkney and Stonehaven.

Within the Clan Donnachaidh results, this category has a number of 37-marker matches with other surnames.

13 24 14 10 12 14 – Haplogroup R1b
Duncan A; Robertson



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
R1b	13	24	14	10	12	14

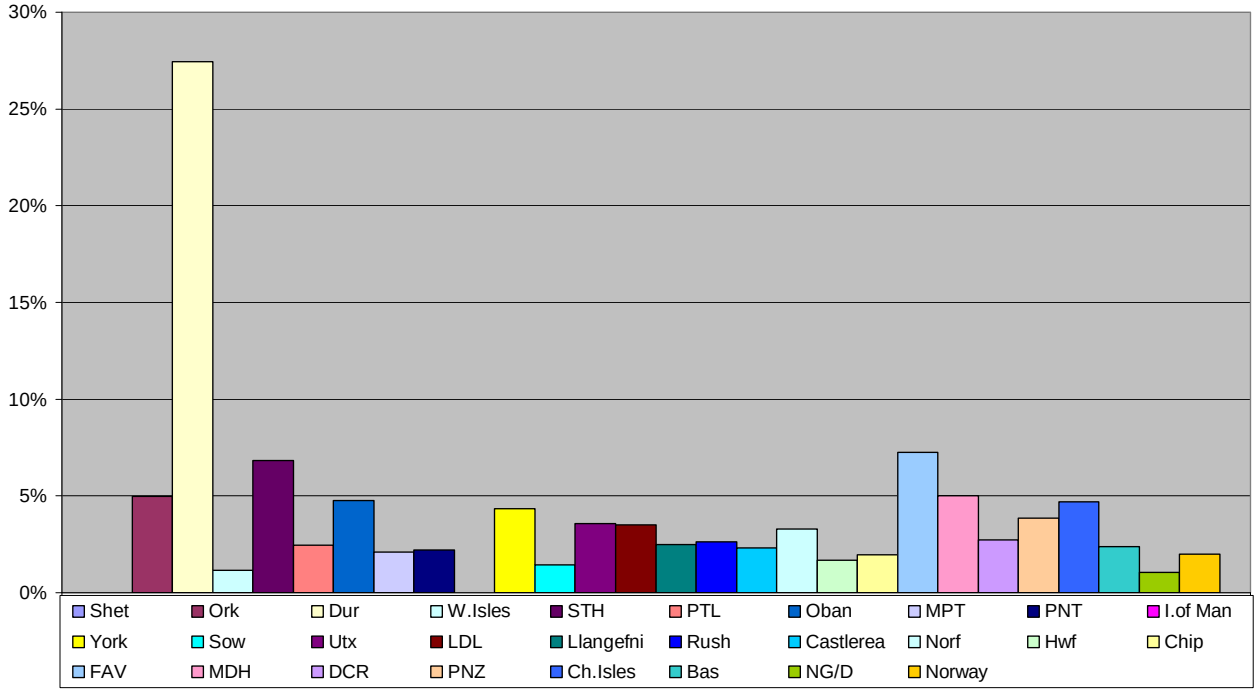
Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

This category represents only 1% of the 2003 survey results, but 6% of the Clan Donnachaidh results. Most of the results came from extensive testing among Duncans in North America, but a couple of Robertsons also come into this category. (The Duncan and Robertson results diverge on additional markers.)

Within the Clan Donnachaidh results, this category has registered no 37-marker matches with other surnames.

As can be seen from the chart, this result did not appear in many areas. The peak was in Orkney, with the second highest proportion in Scotland being found in Stonehaven. It will be noted that the result was not found in the continental sample.

13 23 14 10 12 13 – Haplogroup R1b
Robertson D; Duncan; Reid; Stark



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
R1b	13	23	14	10	12	13

Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

This category has about the same proportion of results in the 2003 survey and in the Clan Donnachaidh results. In the 2003 survey, it represented 4% of the sample in Britain and Ireland and it represents 5% among the Clan Donnachaidh results.

The survey reveals a presence of under or just over 5% in most of Britain with an interesting peak in the sample taken around Durness. The sample in Stonehaven was also higher than most.

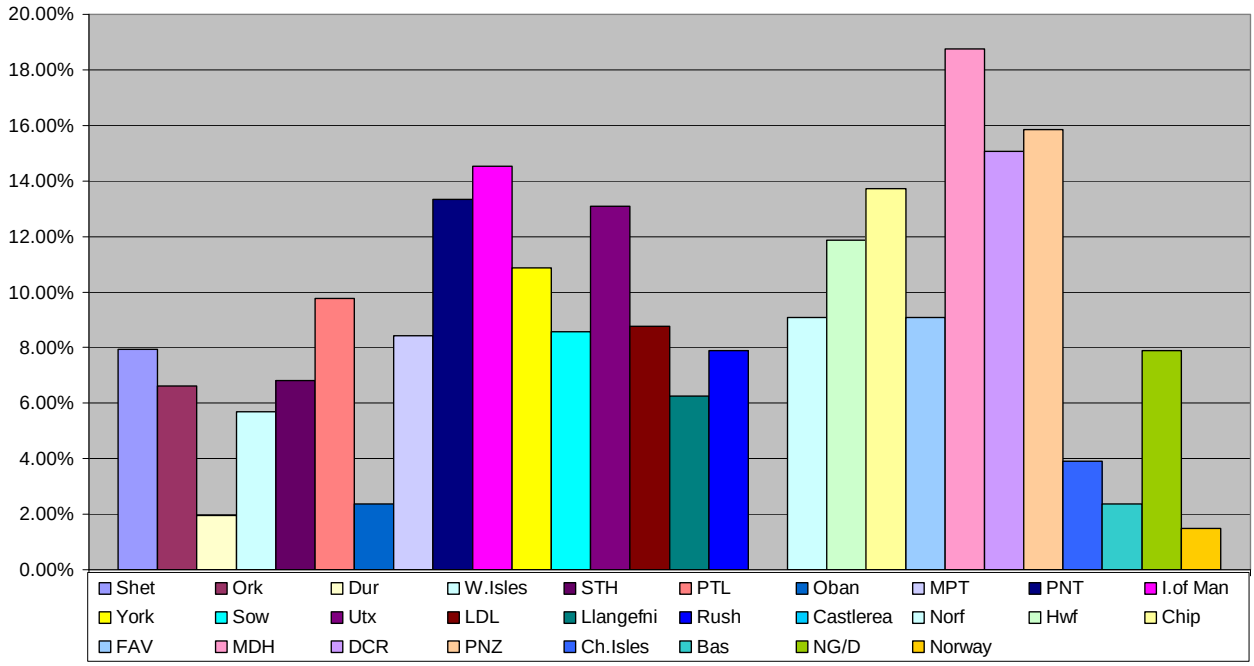
Within the Clan Donnachaidh results, some participants in this category have 37-marker matches with other surnames; others have 37-marker matches only with their own surname.

-o0o-

13 26 14 10 12 13 (chart not available)

The next category (13 26 14 10 12 13) occurred only once in the 2003 survey – in Castlerea in Ireland. It represents 4% in the Clan Donnachaidh survey on the basis of a group of Duncans in the USA who are undoubtedly all related, although the common ancestor has not been identified.

13 23 14 11 12 13 – Haplogroup R1b
Robertson 13 23 14 11; Reid



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
R1b	13	23	14	11	12	13

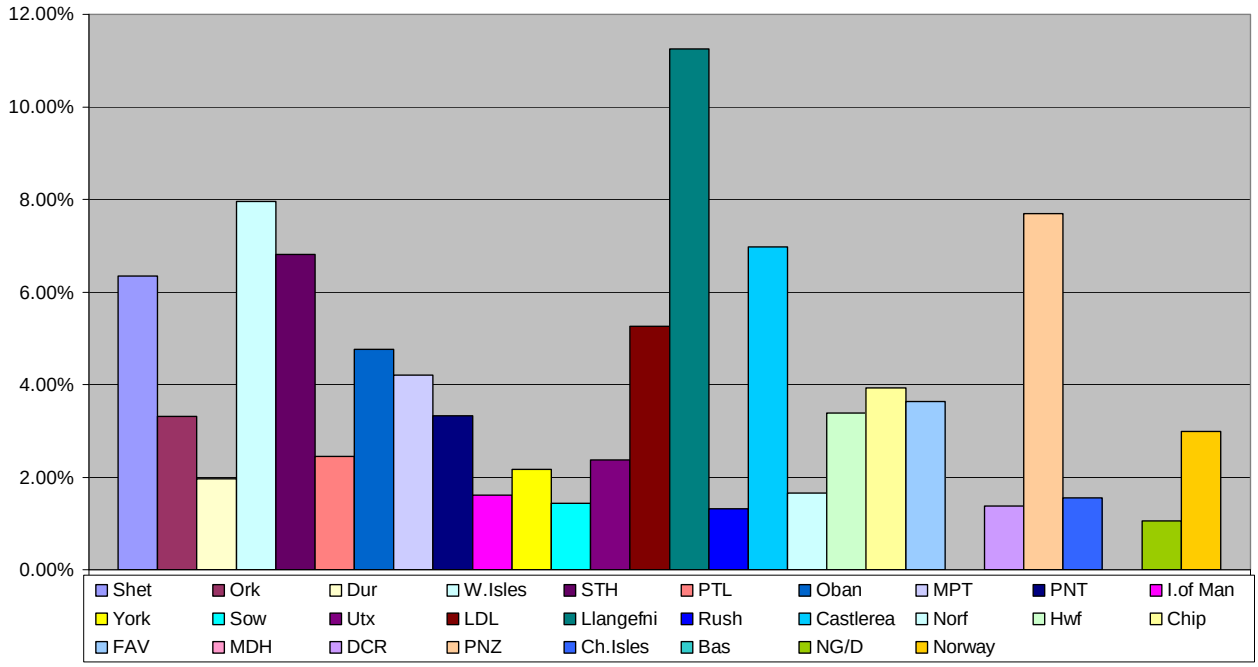
Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

Comparison between the 2003 survey results and the Clan Donnachaidh results reveals the opposite of the comparison in some other categories. This result represents 9% of the survey total but only 3% of the Clan Donnachaidh total.

Despite the low result among Clan Donnachaidh participants so far, this haplotype represents nearly 10% of the sample in Pitlochry and about 7% of the sample in Stonehaven.

Not much information is available about possible 37-marker matches with other surnames within this category. The only result that could be checked reveals no such matches.

13 25 14 11 12 13 – Haplogroup R1b
Robertson C; some Reids



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
R1b	13	25	14	11	12	13

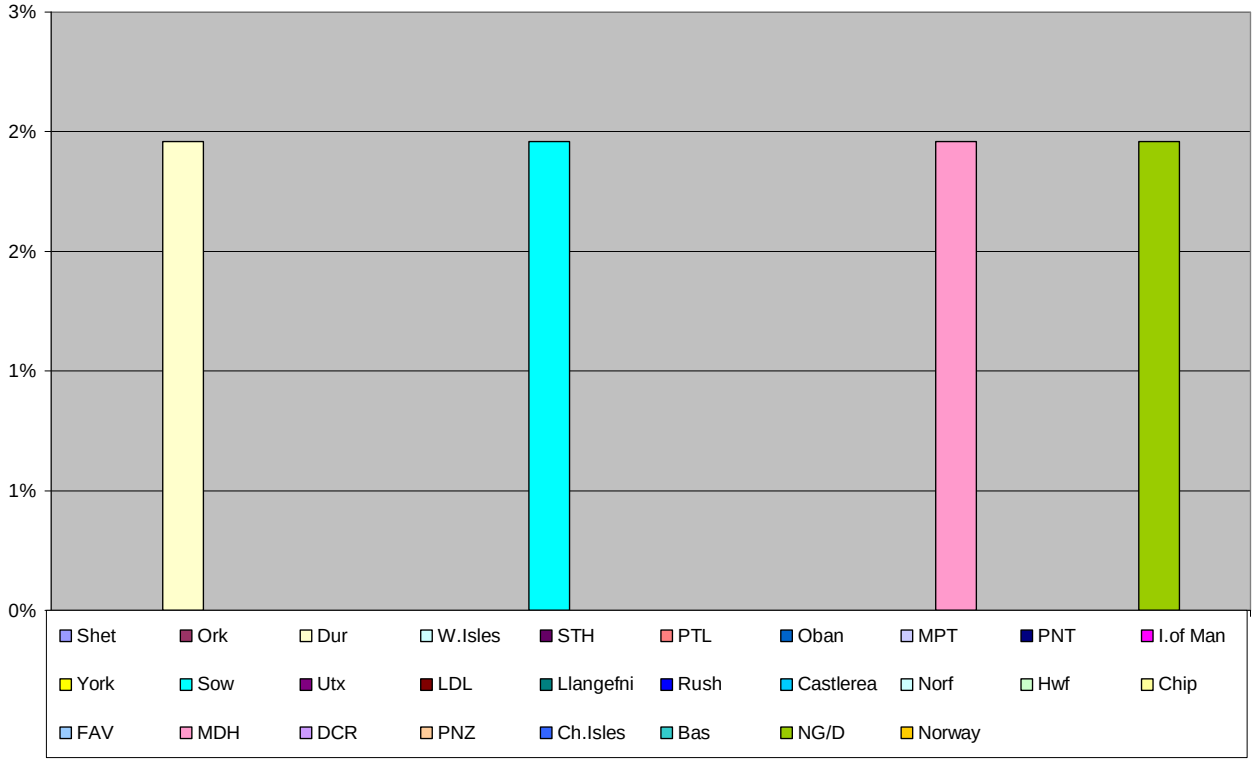
Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

This category represents 4% of the 2003 survey result and 3% of the Clan Donnachaidh result.

It will be noted that, although the main peak is in Wales, there are secondary peaks in the Western Isles and Stonehaven.

Within the Clan Donnachaidh results, there are no 37-marker matches with other surnames.

12 24 14 10 12 13 – Haplogroup R1b
Duncan; Reid; Robertson



(Chart and locations based on sample results from 'A Y Chromosome Census of the British Isles' (2003). The names above indicate which Clan Donnachaidh surnames are associated with this category of results.)

Haplo.	*DYS 393*	*DYS 390*	*DYS 19*	*DYS 391*	*DYS 388*	*DYS 392*
R1b	12	24	14	10	12	13

Results from the continental areas from which samples were taken for comparison are on the far right: Basque country = blue; northern Germany/Denmark = green; Norway = yellow.

This category is small and was sparsely distributed throughout Britain in the 2003 survey. However, it represents 2% of the Clan Donnachaidh survey. In Scotland it was found near Durness, but it may well occur elsewhere. One participant in this category can trace back ancestors over a number of generations in the Edinburgh area.

This category shows a link with Denmark and the adjacent area of northern Germany.

No 37-marker matches with other surnames have been noted within the Clan Donnachaidh results.

Suspect genealogical sites
In an earlier communication, mention was made of a website relating to a Duncan family in the USA that seemed well documented.

However, a very experienced Duncan researcher has advised that the pedigree on this website may have originated with Gustave Anjou who was responsible for a number of fraudulent genealogies. A Wikipedia article relates: *Anjou presented himself as a professional genealogist, and his services were employed by many East Coast families in the late 19th and early 20 centuries.*

Anjou initially earned a reputation for providing copious amounts of research to back up his findings, much to the delight of his clients. For his 'findings', Anjou's services were expensive for the day and he became quite well off.

Subsequent investigation has revealed a combination of flawed research and the intent to defraud. Anjou's method was summed up by George E. McCracken in an article in The American Genealogist (July 1976. (ISSN 0002-8592):

A typical Anjou pedigree displays four recognizable features:
1. A dazzling range of connections between dozens of immigrants to New England; for example, connections far beyond what may be seen in pedigrees produced by anyone else.
2. Many wild geographical leaps, outside the normal range of migration patterns.
3. An overwhelming number of citations to documents that actually exist, and actually include what Anjou says they include and
4. Here and there an invented document, without citation, which appears to support the many connections noted under item 1 above.'
In professional genealogical circles, Anjou's findings are not honored.

Reliable sources
The following website is recommended for American researchers.
A good one for novice genealogy researchers, as well as the more experienced, is on the webpages of America's First Families:

http://personal.linkline.com/xymox/fraud/fraud.htm

This website has a lot of information about fraud, hoaxes, and errors in genealogies.

300 participants
The number of participants continues to grow steadily and we are now over 300. We are very pleased to welcome people with clan surnames other than Duncan, Reid and Robertson – McConkey (as a variant of McConnachie), McRobbie, Roy and Stark are some of the participants who have come to join us. All the results are informative in helping reveal patterns in ancient origins. For genealogical research, we would encourage you where possible to try to seek out direct male-line representatives of families with your surname that you have reason to think may be related to you because they came from your ancestral area or because of some other possible ancestral connection.

Relationships
Gradually more close matches are starting to appear as more participants take part – though it is obvious there are a large number of founding fathers. Clan Donnachaidh means the Children of Duncan and it is clear that most of Duncan's children have been adopted. This is probably what most people would expect.

A patriarch who has been identified among the surnames Duncan, Reid and Robertson is Niall of the Nine Hostages, High King of Ireland in the early fifth century. Some participants have an exact match according to the profile provided by Family Tree DNA and others come close – and there could well have been mutations over the past 1700 years. Kinship with Niall was first identified by matches with families associated with the O'Neills in Ireland and has been traced to other Irish and Scottish family names, testifying to migration between Ireland and Scotland over many centuries.

It is possible that other ancient patriarchs will emerge for some of the other results, which can be divided into general groupings – though these may be too early to put names to the people concerned.

A survey of DNA projects in the UK
The hypothesis that most surnames have multiple origins has been confirmed by a recent survey of DNA projects in one of Britain's leading family research societies – the Guild of One Name Studies. The survey

was carried out by Christ Pomery who was one of the first people to make use of DNA sampling in genealogical research in the UK. He has published various articles on his own survey (on the English surname Pomeroy) and genetic genealogy and is one of the prime movers in raising the profile of this type of research in the UK.

Sixty-seven projects have been identified and 61 responses were received.

The majority of the projects are still in their early stages. Only in one have all family trees been tested. Eight project leaders have also tested most of their family trees but the majority have tested fewer than half. It is of course much easier to obtain full coverage when dealing with a surname that is not very numerous.

The key question is whether the name had a single genetic origin within a genealogically relevant timeframe or multiple genetic origins, i.e. whether it was founded by a single person at some point in the last 500-700 years or whether many people adopted the name independently for different reasons in different places and at different times.

It appears that about 40% of the project leaders started their DNA project believing that their surname had a single founder but after DNA results were obtained that percentage had fallen to about 20%. Three project leaders changed their belief from multiple origins to single origins while 14 changed from single origins to multiple origins.

The preliminary findings are:
- One third of project leaders have changed their mind about the genetic origin of their surnames.
- The vast majority of surnames appear to have multiple genetic origins. This feature is even more prevalent among the large-scale projects with relatively higher numbers of participants.
- Only 20% of projects have yet tested someone from more than half their documented trees so most projects are still in their early days.

These findings are of interest in showing that there is still a great deal of scope for the development of genetic genealogy in the UK.

Chris Pomery went on to discuss the need to provide more precise definitions and to establish the degree of checking required to authenticate a documented family tree.

Definitions are needed for:
- Single-origin and multiple-origin formation DNA signature patterns.
- What constitutes a genetic family (i.e. similar DNA results linked together as a potentially documentable family tree)
- The degree of checking required to authenticate a documented family tree.

A second issue is one of standards: none have yet been set for DNA surname projects. Those most needed are:
- The requirement for a minimum of two tests per documented tree to confirm its DNA signature
- The use of a minimum resolution of DNA test, thus avoiding attempts to match low-resolution (10-25 markers) with high-resolution results (37-67 markers), given that low-resolution results often diverge from each other when expanded to a higher resolution.

A third point (which applies in other countries that have been populated by immigrants) was that US-based participants make up only a sub-set of the available genetic diversity in the UK but a sub-set now found in much greater population numbers than in the UK, a feature known as the ‘founder effect’ or a genetic bottleneck.

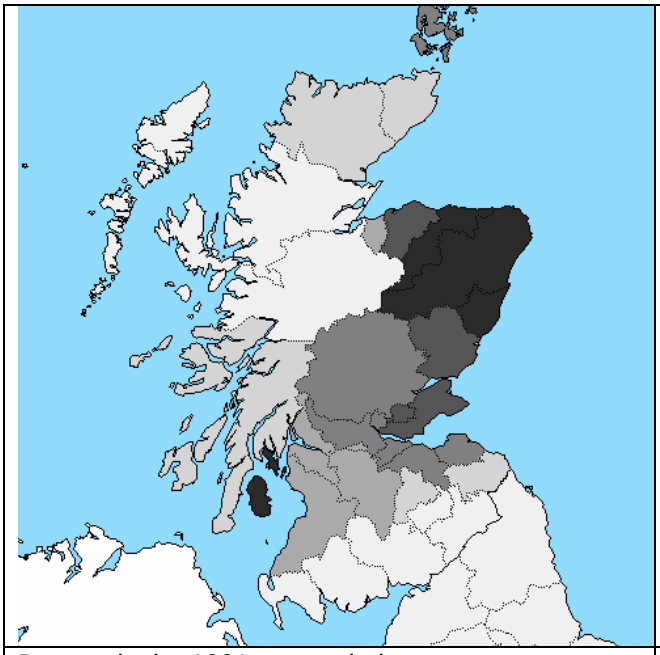
This effect can be seen in some of the Clan Donnachaidh DNA results. We have some excellent matches among people whose families have been settled in the United States for a number of generations. The conclusion appears to be that they are descended from one immigrant or perhaps immigrant brothers or even cousins. We also have many participants who still have not found a close match and, without some insight into the ancestral place of origin, it may take some time to trace a genetic match in Scotland. However, we should not despair. We have to keep working on it.

Some of the less prolific surnames (see the maps at the end, which show the distribution and numbers in 1881) are potentially good subjects for genetic genealogy. The best approach for the more prolific surnames is probably on a regional basis, starting by seeking out people with well-researched family trees.

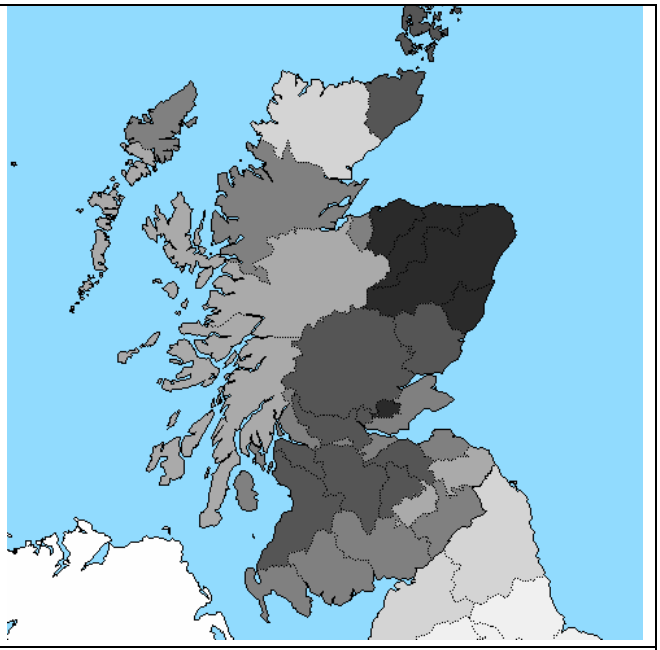
The Guild of One-Name Studies survey indicates an increasing awareness of genetic genealogy in the United Kingdom and of the need to consider it as a facet of genealogical research.

Surname distribution maps based on the 1881 census of Great Britain
Produced by Archer Software for private research

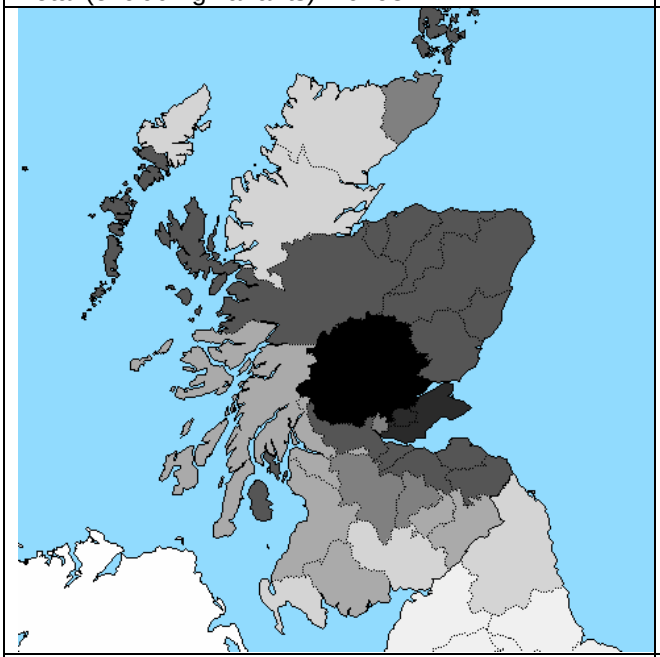
These maps show the concentrations of certain surnames in the project and the number of people bearing that name recorded in the 1881 census index.



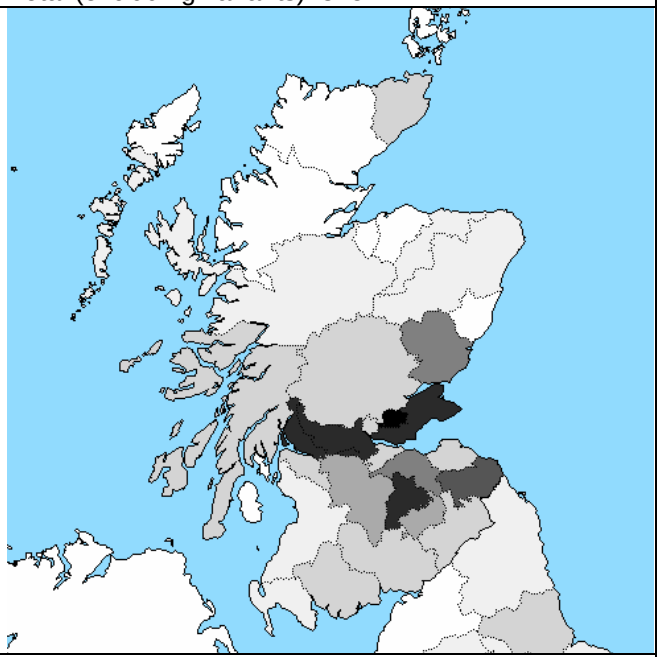
Duncan in the 1881 census index
distribution per 100 000 of the population
Total (excluding variants): 20493



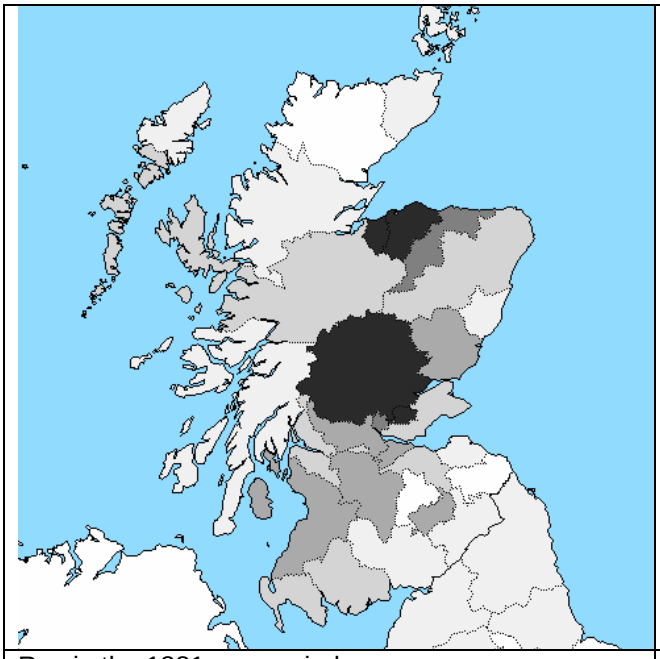
Reid in the 1881 census index
distribution per 100 000 of the population
Total (excluding variants): 31517



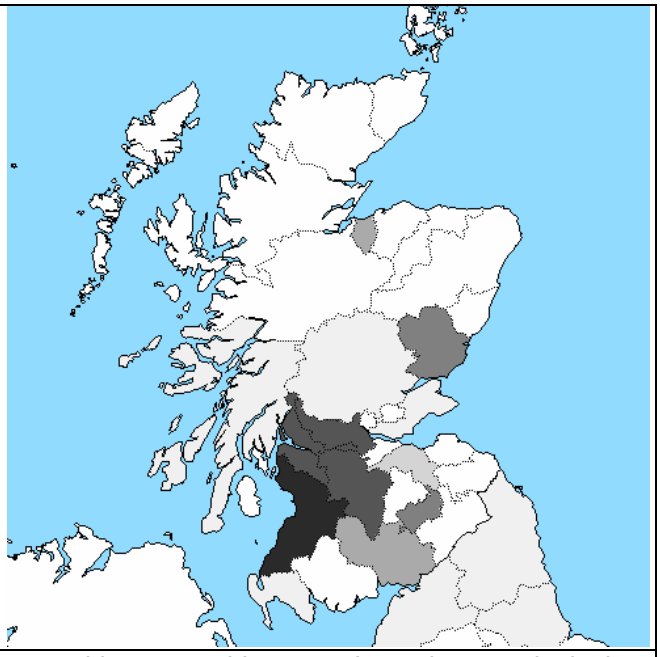
Robertson in the 1881 census index
distribution per 100 000 of the population
Total (excluding variants): 50256



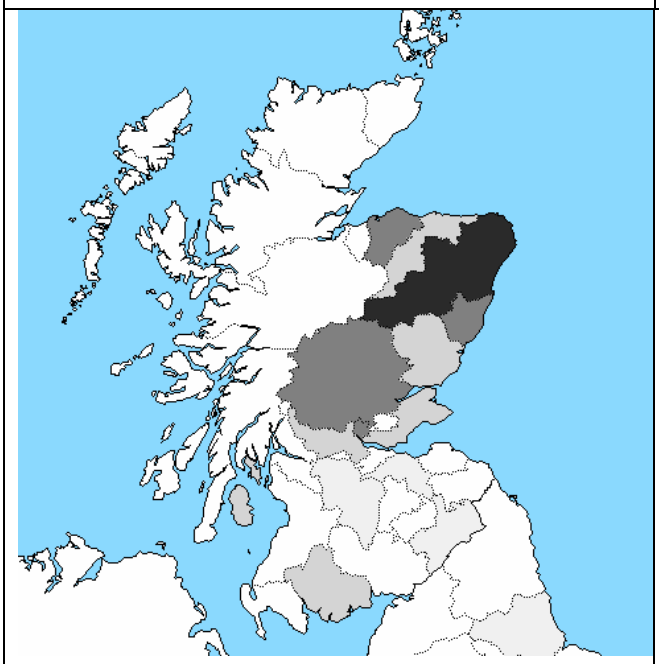
Stark in the 1881 census index
distribution per 100 000 of the population
Total (excluding variants): 4111



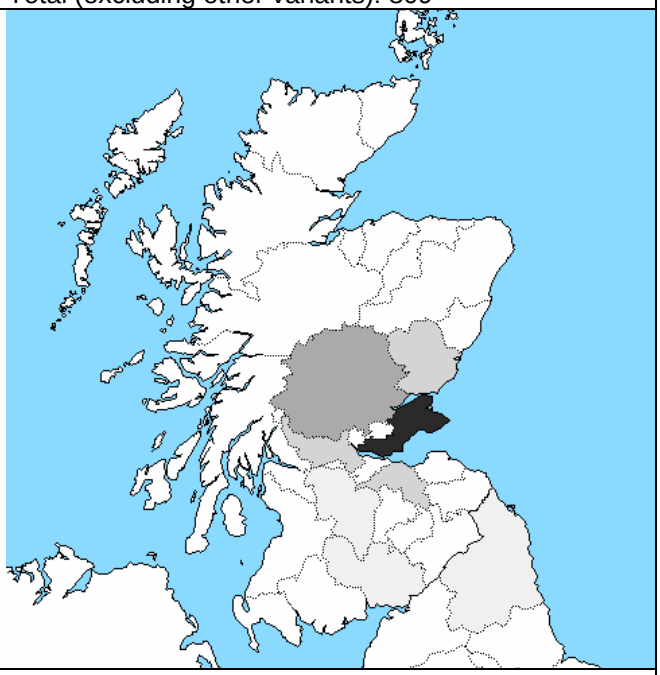
Roy in the 1881 census index
distribution per 100 000 of the population
Total (excluding variants): 2732



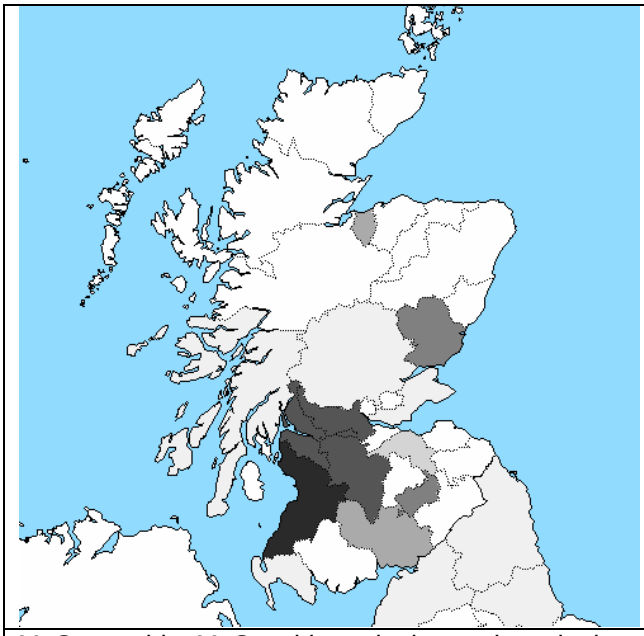
Donachie, Donnachie, Donachy and Donnachy in the 1881 census index
distribution per 100 000 of the population
Total (excluding other variants): 809



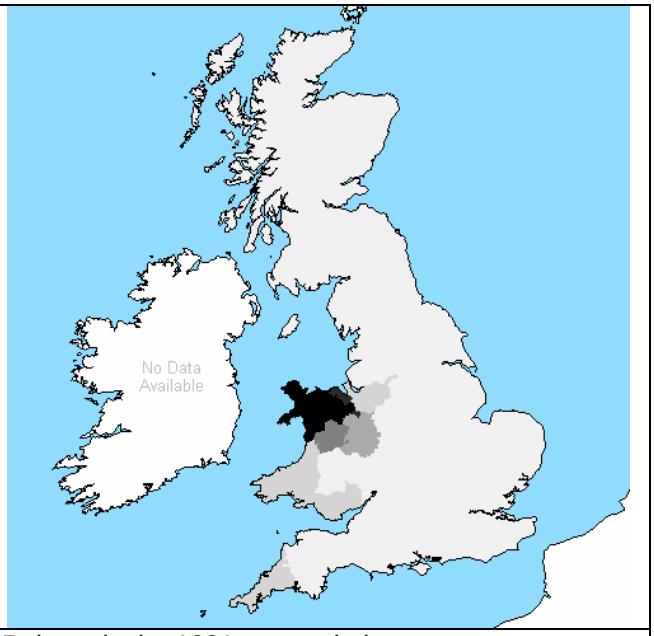
McRobbie and MacRobbie in the 1881 census index
distribution per 100 000 of the population
Total (excluding variants): 478



Inches in the 1881 census index
distribution per 100 000 of the population
Total (excluding variants): 162



McConnachie, McConchie and other variants in the 1881 census index
distribution per 100 000 of the population
Total (of the variants included here): 3290



Roberts in the 1881 census index
distribution per 100 000 of the population
Total (excluding variants): 112696 (there are Roberts families in Scotland but the map does not show them as the concentration is highest in north-west Wales)

The distribution is shown per 100 000 of the population rather than actual numbers as this gives a better indication of concentrations and the main areas of origin. By the later 19th century migration for work had led to large numbers of people moving to the big cities and industrial areas. Unfortunately the maps for Scotland highlight the whole county and do not identify the individual parishes where the surname was found; this would give a better indication of clustering.

The darker the colour, the higher the proportion of people with that surname in the population.

Participants' results
Results are still generally arranged by surname for genealogical convenience.

Many Duncan results have been derived from extensive coordinated testing commissioned by people researching the Duncan name in North America. Because of this a number of family groups emerged early and the results have been arranged somewhat differently from those of other participants.

Some Robertson family groups have been formed but, pending the formation of groups, other Reid and Robertson results have been grouped in clusters according to matches on a certain number of markers. These groupings are based on the groupings identified in the Capelli survey of 2003[2] and the plan is to regroup them further in the light of Kevin Campbell's analysis of the R1b results[3] in the Oxford Genetic Atlas Project. The Oxford Genetic Atlas Project was the basis of Professor Bryan Sykes' book Blood of the Isles[4] which analyses the genetic history of the British Isles. The Oxford Genetic Atlas Project data can be consulted online[5].

Other names are grouped only by surname but will be split as they become more numerous and matches occur.

Professor Stephen Oppenheimer also published an analysis of the genetic history of the British Isles[6] in 2006. He used available STR gene-type data to map the detail of British colonization by defining

[2] *A Y Chromosome Census of the British Isles. Current Biology, Volume 13, Issue 11, Pages 979-984, May 2003,* C. Capelli, N. Redhead, J. Abernethy, F. Gratrix, J. Wilson, T. Moen, T. Hervig, M. Richards, M. Stumpf, P. Underhill (http://www.ucl.ac.uk/tcga/tcgapdf/capelli-CB-03.pdf).
[3] http://www.jogg.info/31/index31.htm.
[4] *Blood of the Isles: exploring the genetic roots of our tribal history*, Bryan Sykes, 2006.
[5] http://www.bloodoftheisles.net/results.html.
[6] *The origins of the British: a genetic detective story*, Stephen Oppenheimer, 2006.

geographically useful clusters of gene types, each closely related to identifiable founding gene types in Western Europe. He found they split into 16 gene clusters that all had a very clear geographic localization so it is likely that their modal types represent prehistoric ancestral founders. Professor Oppenheimer has not published his datasets, so his findings can be related to surname projects in only the most general way. Kevin Campbell has deconstructed Professor Oppenheimer's R1b datasets in the Fall 2007 issue of the Journal of Genetic Genealogy.

Gene pools and emerging relationships
The larger gene pool for particular surnames in Britain means that it will take longer and require more extensive testing to identify relationships between families with the same surname. Testing on a local and regional basis will probably yield the best results. Nevertheless some local relationships are beginning to emerge in Scotland and some Duncans and Robertsons in the United States have found a good genetic match with participants in Scotland.

Because of extensive testing in the United States, a number of Duncan groups and several Robertson groups with good matches have emerged. These reflect descent probably from one man or perhaps brothers or cousins who entered the North American colonies in the 17th or 18th centuries. Because the gene pool for surnames of British origin is smaller outside the UK, genetic identification of the descendants of these 'founder' ancestors can play a significant role in establishing which families with the same surname are related.

The majority of Clan Donnachaidh participants tested so far belong to the largest population group in Europe (Haplogroup R1b), which expanded throughout Western Europe after the last Ice Age and which was the first to recolonize Britain about 11 500 years ago.

About 6% of Clan Donnachaidh participants belong to Haplogroup I, which is associated with Denmark and the adjoining area of Germany. Sykes and Oppenheimer agree that some Haplogroup I populations entered Britain from the east in prehistoric times, before the arrival of Anglians and Vikings. A very small number of participants belong to Haplogroups E, J and R1a.

The 'Genghis' effect
One of the genetic consequences of the rise of powerful men is that they monopolize the women and have more children. One factor to be noted is the 'Genghis' effect noted by Professor Bryan Sykes. Some years ago researchers in Oxford found a Y-chromosome more or less within the geographical limits of the Mongol Empire. The theory is that this is the Y-chromosome of the first Mongol emperor, Genghis Khan, who lived in the first half of the 13th century. It has been calculated that 16 million men carry this Y-chromosome. On conquering a new territory, Genghis Khan would kill all the men then bed all the good-looking women. When he died his empire was distributed among his sons and their sons, who, being rich and powerful, continued to spread his genetic legacy.

Similarly, though on not such a substantial scale, large numbers of men in Britain are descended from only a few genetically successful ancestors in ancient times. Professor Sykes comments that the longer particular male lineages have been in place in the British Isles, the more similar the Y chromosomes become.

The effects of Y chromosome success are something to be aware of in interpretations of genetic evidence. Sykes comments that the predictable effect will be to distort the Y chromosome profile of a region in favour of the local chieftains and to exaggerate the differences between the regions.

There are very large clusters of very similar chromosomes in one location and not in others, for example the Ui Neill chromosome in north-west Ireland (the 'Niall of the Nine Hostages' matches) and the Somerled chromosome in the Highlands and Hebrides. This dramatically reduces the genetic diversity.

It should also be noted that a high number of matches with different surnames, which points to descent from a prolific common ancestor, has the effect of artificially reducing the estimated number of generations between participants with matching genetic profiles and the common ancestor. Family Tree DNA makes cautionary remarks about comparing matches between people with different surnames. There may be grounds for thinking that high-resolution matches between different surnames are quite recent. They may also be a reflection of something much older.

High-resolution matches with other surnames
This 'Genghis' effect probably explains the fact that a number of Clan Donnachaidh participants have high-resolution matches with other surnames at 37 and even 67 markers.

Family Tree DNA addressed the question in Facts & Genes, Volume 6, Issue 3 (July 2007) by pointing out that before surnames were adopted men with the same Y DNA result were spread over a geographic area owing to migrations. In addition two men with different surnames may have a matching Y DNA result because of convergence. This means starting with two different Y DNA results in the past and the results mutating over time to where they match or are a close match today. The larger the population for a DNA result, the greater the opportunity for convergence to occur. Since Haplogroup R1b is the largest population group in Europe, matches with other surnames are very common.

Most of the Clan Donnachaidh participants who have such matches are in Haplogroup R1b but there are some of these matches in Haplogroup I. For instance, some Haplogroup I Robertsons have a close match with some Hamiltons. The Hamilton DNA project site mentions this and remarks on a close association between some Robertson families and some Hamilton families in Scotland (without giving details), suggesting that related families took different surnames when surnames were adopted. One of the Hamilton researchers has calculated the frequency with which some of this group's marker values occur (notably 385b and 389-ii) compared with other Haplogroup I marker values and found it relatively low. The Oxford Genetic Atlas Project has so far found the short form of this haplotype only in Orkney and/or Shetland. (This is a sampling result and is not the final answer as to where this family originated.)

It should be noted, however, that the Robertsons concerned have high-resolution matches with several surnames, though possibly not on the rarer marker values. More work needs to be done on this. An analysis of the Clan Donnachaidh high-resolution matches with other surnames still has to be carried out and perhaps will cast a little more light on this phenomenon.

Ancestral origins
A compendium of earliest known ancestors is also being sent. It has been compiled from information sent in by participants, Gedcom files and recommended websites.

The intention is to expand this to brief single-line family trees, so it is possible to see how results relate to each other, particularly in the case of genetic matches. No information will be published about living people. A genetic profile related to a particular ancestral line will help other researchers identify which families in their ancestral area are related or not related.

We will be asking for ancestral information if we do not have any information concerning your family. We might also ask one or two other questions, such as whether crookit crannies occur in the family.

Crookit crannies
We asked recently whether any Duncans were known to have crookit crannies (a pronounced curve of the little fingers, curving towards the adjacent finger). This is quite common among Reids and Robertsons and has been considered simply an Atholl characteristic as obviously it can be inherited from either parent. We have received a reply confirming that crookit crannies are also found among the Duncans.

Family Tree DNA's Fourth International Conference on Genetic Genealogy
Two Clan Donnachaidh project administrators, Tim Duncan and Bill Robertson, attended the conference held in Houston, Texas, on 20-21 October 2007.

Tim reports:
The FTDNA conference was another good one this year. About 220 people attended. There were a good array of topics discussed, ranging from managing a project, the new website, a new test coming out, and much technical material.

1. Adrian William, the new IT manager, led a good discussion on the current problem of a seven- year old website build on an archaic code platform. He has hired a team of IT personnel, which FTDNA did not have before. They have fixed a number of 'bugs' in the current code to keep it going until next fall.

Adrian and his new team are going to build a completely new, up-to-date, flexible code base website/IT system. They are receiving a lot of needed and suggested changes to the whole system from group administrators. They are planning to have a beta version out early next fall.

2. FTDNA and Tucson are going to start research on the database looking for haplotypes that may show signs of a regional nature i.e. look for a Pictish signature. They are going to request permission from participants that have a documented link to Scotland, Ireland, Wales, and England.

3. FTDNA is working on an additional set of markers. This set will be base on some more changeable markers with the hope that this will show some separation in the 67/67 marker matches.

4. Another new research project will focus on finding family-line specific SNP's. More will be coming out on this.

Extracts from the conference press release:
The Conference's overflow crowd, comprised of Family Tree DNA Project Administrators from throughout the US and Europe, was given a first look at the workings of the comparative database for Full Mitochondria Sequences, transforming what had previously been an anthropological test into the world's first high-resolution genealogy test. These Full Genomic Sequence (FGS) studies of the complete mitochondrial molecule mean that genealogists will, for the first time, be able to make significant comparisons between individuals who share a recent history.

Family Tree DNA's Greenspan unveiled the MyMaps tool, the innovative genetic mapping system that enables individuals who don't know where their European ancestors came from, to identify their possible specific geographical origins. MyMaps is applicable to all of the company's Y-DNA and mtDNA tests. "This is a big advance for genealogists," enthuses Greenspan, "because MyMaps will allow an individual who doesn't know, for example, what part of Ireland, or what part of Germany, or what part of France his immigrant ancestor came from to zero in on his closest genetic matches."

"A Walk thru the Y Chromosome" is the significant third in the trio of Family Tree DNA innovations introduced at the two-day conference. Thomas Krahn, Director of Family Tree DNA's Genomics Research Center, made the presentation, detailing a test to sequence vast sections of the Y chromosome. Those interested in finding family connections can order a fragment of their own DNA and check for an apparent match with others who have had the test.

Subclades
Family Tree DNA only recently offered testing for subclades of Haplogroup R1b so not many participants have taken the test. At present it looks as though, potentially, a majority of participants will turn out to belong to the undifferentiated R1b1c category. However, there are some exceptions and these could be of interest for longer-term genetic studies.

R1b1c7, associated with the North West Irish variant and a match with Niall of the Nine Hostages
Dr John McEwan has noted that all males with STR values associated with the North West Irish modal haplotype who have been tested on the SNP M222 have tested positive[7]. Those tested included a number of people with known Ui Neill surnames plus others with less definite Ui Neill clan affiliations. 'If these results are reinforced as more persons are tested, it would imply that M222+ is a necessary, though perhaps not sufficient condition, to be part of the North West Irish grouping and, perhaps, associated with the Ui Neill.'

A subclade test could be of interest to anyone who has a Niall haplotype or comes close to the Niall haplotype. The only participant with a Niall of the Nine Hostages match who has taken a subclade test is a Duncan who is indeed in the R1b1c7 category.

There is now an R1b1c7 haplogroup project registered with Family Tree DNA. According to the project administrator, the project is also individuals who have not been SNP tested but whose haplotypes show most of the following DYS values. (Please note that only certain values are listed here. To make a comparison you have to select the corresponding values from your home page or from the results on the website.)

390	385b	392	448	449	464	456	607	413	481	714
25	13	14	18	30	15-16-16-17	17	16	21-23	25 or 26	N/A with FTDNA

These values are most likely to be associated with a positive result for SNP M222.

It should be noted that a match with the marker values listed above indicates that it is likely that the participant belongs to the R1b1c7 subclade but does not guarantee that he does.

[7] *Insights into the O'Neills of Ireland from DNA testing*, Edwin B. O'Neill and and John D. McLaughlin, Journal of Genetic Genealogy 2:18-26, 2006, p. 22.

We are reporting on this as something that may be of interest in defining the identity of a particular family group. It would help to separate people of the same name with fairly similar haplotypes. People with a Niall-type haplotype will of course have a very large number of remote relatives with different surnames and thus a number of high-resolution matches with different surnames.

The other point of interest about this subclade is that its remote origins are strongly associated with North-West Ireland and it is most often found in North-West Ireland and Lowland Scotland. It is not the dominant DNA profile in any of the counties concerned but in some (Donegal, for instance) it approaches 20%.

See the map on the R1b1c7 project website: http://www.familytreedna.com/public/R1b1c7/ It should be noted, as the project administrator points out, that the map is intended only to show a population concentration. 'R1b1c7 individuals have roots within the oval but are not constrained by it. R1b1c7 individuals have been found in nearby areas outside the footprint – in the Western Isles and in Orkney, for example, as well as in the North of England adjacent to the Scottish border.'

Just to show that you cannot always judge by haplotype, the only Clan Donnachaidh participant who has tested positive as R1b1c7, other than the Duncan mentioned, has the result 24-12-14 instead of the 25-13-14 listed for the first three markers above.

R1b1c6
We recently received some correspondence about this subclade, after a French researcher discovered a Robertson participant in this category. The researcher is interested in tracing the locations of this subclade. R1b1c6 so far has strong associations with the north of Spain; it has also been found in south-western France and in Britain. The association with Spain indicates it is an old marker. It is, however, relatively rare.

The Robertson in question is in Group C, where three participants have been tested as R1b1c6. Another participant who has a confirmed descent from Jacob Robertson who died in 1780 in Caswell County, NC, has just received results confirming he also belongs to this subclade. Although there was not much doubt, this establishes this subclade as being associated with Jacob's family. (There is more on this family below.)

Interestingly their haplotype is not so very different from some others. In fact it follows the pattern DYS390=25, DYS391=11, DYS392=14 that has been associated strongly with Ireland, though evidently this subclade did not develop there.

As it is comparatively rare, it will be of particular interest in identifying Robertsons who are related to Group C. It would be a defining factor for anyone who wishes to confirm a relationship with Group C.

A general summary of what is known about this subclade can be found on: http://www.geocities.com/mcewanjc/m167.htm.

The Wikipedia article updates this information by mentioning that this subclade has been found in South West England, Ireland and to a lesser extent in Scotland: http://en.wikipedia.org/wiki/Haplogroup_R1b_(Y-DNA).

R1b1c6 and R1b1c7 map
Here is a map showing the location of R1b1c6 and R1b1c7 results, based on the information collected by Dr John McEwan. As mentioned above, the map may not fully reflect the situation with regard to R1b1c6, which has been found in England and Ireland and to a lesser extent in Scotland.

http://www.vizachero.com/images/R1bClades.pdf

R1b1c9 and R1b1c10 maps are also shown. As yet we do not know of any Clan Donnachaidh participants in these subclades.

You can't believe all you read
This item discusses some family trees published on the Internet. The trees relate to Robertsons but the principles apply to all genealogical research.

Two participants have recently mentioned Robertson family trees recorded on RootsWeb. These family trees have generated over 90 different references to claimed descents from a Scottish couple, William Robertson and Eleanor Pitcairn. In some of these trees they are said to have married around 1720 in Edinburgh, in others in 1652 in Ayrshire. Different lists of children are attributed to them, with descents claimed from several of these children.

There is some interest in looking at this family tree because a number of people have associated themselves with it. The extract below sets out a version that seems to have been followed by a number of RootsWeb contributors, most of whom do not have the surname Robertson. The information has evidently been copied from a publication or website, not obtained from original research.

Name: William Robertson
Sex: M
Birth: 1620 in Kindeace, Ross, Scotland

Father: William Robertson
Mother: Anna Marie Mitchell

Marriage: Eleanor Pitcairn

Married: 1652 in Ayrshire, Scotland

Children:
Jeffrey Robertson b 1654 in Edinburgh, Scotland
William Robertson b 1657 in Edinburgh, Scotland
Thomas Robertson b 1658,
George Robertson b abt 1662 in Scotland
Nicholas Robertson b 1664 in Scotland
Nathaniel Robertson b 1666 in Scotland
John Robertson b 1670

A number of descents from some of these children are listed.

Several questions spring to mind when reading through this basic information. A man born in Ross-shire in the north of Scotland, married in Ayrshire in the south-west, who brought up a family in Edinburgh in the south-east. Anna Marie is an unlikely name for early 17th century Scotland, where double names were rare. The children's ages, however, seem to fit in with the parents' stated marriage date.

Further investigation on the website reveals some information about some of the children. Some of the entries quote sources.

William was the clerk of the Virginia Council, the clerk of William and Mary College, and clerk of the General Assembly of Virginia, appointed Oct. 27 1705. His portrait hangs in the lobby of William and Mary College.

VIRGINIA MAGAZINE OF HISTORY AND BIOGRAPHY, V. 32, Jan. 1924, Issue 1, p. 54.
Rev. George Robertson, a Scotchman, who was previously a chaplain in the navy, was licensed by Bishop Compton of London, as a missionary to Virginia. He became minister of Bristol Parish in 1693 and held the charge until his death in 1739. a report made by him to the Bishop of London in 1724 is in Slaughter's Bristol Parish. ... Rev. Geo. Robertson married 1st _____ and 2nd prior to 1711 Mary, daughter of Peter Eppes. Issue (1st marriage) George of Chesterfield County, married Martha Field, daughter of John and Sarah (Randolph) Archer. (2nd) John married Ann Royal, James m _____, Elizabeth.

These entries seem reasonably well documented in that sources are quoted. What about the parents?

Working backwards through some of the Internet family trees, it is possible to discover that the father of these seven sons, William Robertson, is supposed to be descended from the family of Robertson of Struan through the Robertsons of Muirton and Gladney. The source is Burke's Landed Gentry.

A copy of Burke's Landed Gentry can be found on the Internet. Burke sometimes does not mention dates, but it is not too difficult to work backwards. Some names in this work are familiar.

WILLIAM ROBERTSON, of Gladney, in Fife, m a daughter of Dr Mitchell, and was father of

THE REV. WILLIAM ROBERTSON, one of the ministers of Edinburgh, who m. Miss Pitcairn, of Dreghorn, and had issue. Their eldest son,

DR WILLIAM ROBERTSON, b. in 1721, principal of the University of Edinburgh, royal historiographer, and author of the History of Scotland, &c., m. his cousin, Miss Nesbett, and d. 1793, leaving issue.

So Burke's Landed Gentry states that William Robertson and Eleanor Pitcairn had a son named William, born two generations after the children mentioned on the website – who became the famous historian, based in Edinburgh and not in Virginia. It would appear that his parents married around 1720.

Investigation in the IGI reveals two marriage entries for Eleanor and William. One submitted by a member of the Church of Latter Day Saints records their marriage in the register of Borthwick in Midlothian on 20 October 1720. William was Minister of Borthwick; William and Eleanor's son, the famous historian, was born in Borthwick. But the marriage is also recorded in the registers of St Cuthbert's church in Edinburgh. (Both these entries are probably valid as Church of Scotland marriage entries refer to the proclamation not the marriage unless otherwise stated.) Another extract from the registers states that Eleanor daughter of David Pitcairn and Mary Anderson was born on 20 August 1701 in Colinton, a suburb of Edinburgh.

What about the Ayrshire marriage mentioned on the Internet? Burke describes William's wife as Miss Pitcairn of Dreghorn. Dreghorn is in Ayrshire, which presumably inspired the original compiler of this tree to locate the marriage in Ayrshire. It appears from further investigation on the Internet, which produced a reproduction of a documented printed history of the Pitcairn family, that Dreghorn is a territorial designation, like Robertson of Gladney. Eleanor's name was Miss Pitcairn of Dreghorn.

One further factor in distancing at least one of the Virginian Robertsons from the Robertsons of Gladney congtemporary with them is the profession of the Rev. George Robertson as an Episcopalian minister. The Rev. William Robertson of Borthwick was a minister of the Presbyterian Church of Scotland and his son William Robertson the historian was also a minister of the Church of Scotland. People can diverge from their family's views but making careers in two different religious denominations not particularly friendly to each other seems fairly unlikely.

For the record, the daughter of Dr Mitchell was called Margaret (marriage record 1667, National Archives of Scotland).

Thus there are very serious inaccuracies in the RootsWeb family tree. It is not known how there came to be two generations' divergence between the genealogy in Burke's Landed Gentry and the RootsWeb tree.

As the parents are wrongly identified it may be suspected that the children listed are not brothers. Someone appears to have strung together the names of Robertsons in Virginia in the late 17th century and tried to assemble them into one family tree.

Some Clan Donnachaidh DNA participants are descended from some of the men listed on RootsWeb as children of William and Eleanor. Recent documentary research indicates that some members of Robertson Group C are descended from the John Robertson, said to have been born around 1670, who is listed as the youngest son of William and Eleanor in the RootsWeb genealogies. It is not clear whether he was the brother of any of the other men listed. However, there are participants who apparently trace their ancestry back to one of the other supposed sons of William and Eleanor and these participants have a different DNA profile from the very distinctive profile of Robertson Group C.

Anyone descended from any of the men listed as sons of William Robertson and Eleanor Pitcairn should take care to check published family trees against documentary research.

However, this is the sort of situation where DNA research can be of great help. It is a very powerful tool in sorting out this kind of genealogical muddle, where full records may not exist or are hard to find. If it were possible to establish a genetic profile for all the men listed as the supposed sons of William and Eleanor, this would be of great value in verifying paper family trees.

With regard to the Robertsons of Virginia and the seven men listed as the sons of William and Eleanor, two members of Robertson Group C have a documented descent from John (the other members of Group C, who are related to them, may well be descended from John but we have not yet seen documentary proof) and another participant is descended from Jeffrey. Needless to say the Jeffrey and John results are different. There is no question of a family slip-up; this simply provides further proof that the RootsWeb family tree has no basis in fact. It would be very useful to establish a genetic profile for all these 'sons' who left descendants.

Most of the Robertson D Group is known to be descended from a later resident of Virginia: Thomas Robertson of Amherst County (1762-1834), who may have been the son of Arthur Robertson. This group has a different genetic profile again.

The Robertson A group also claims 17th century connections with Virginia but its genetic profile is different. Yet another profile is associated with John Robertson, Sr, born about 1740 in Virginia. This John is the ancestor of someone in Group E, where the results come into Haplogroup I.

There may well be other Robertson participants who are descended from 17th and 18th century Robertsons in Virginia and it would be very helpful to be able to establish a genetic profile for all these early settlers.

In all cases, whatever your surname and whatever the period you are researching, documentary research is strongly recommended in conjunction with genetic testing. Published family trees should be checked.

Entering your results on Y Search

Do consider doing this. You do not have to reveal any personal information. Your results and ancestral country of origin will be of interest to researchers who are trying to get an overview of what the DNA results reveal and use it to increase scientific knowledge. As has already been mentioned, we have already been contacted about a participant in a rare subclade. You can upload your information from your home page.

Y Search records the results of participants from a range of DNA testing companies. It provides a central location for comparing matches and perhaps finding matches with participants outside the Family Tree DNA database. There is also FTDNA Mitosearch for mtDNA test results.