

Breifne Clans Y-DNA Project

Report 4

1 April 2008

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Introduction

Within the general R1b haplogroup, the main division to be seen in this project is still between R1b1c7 and not-R1b1c7. This is because no further Irish subclades of R1b1c have yet been defined, although several would seem exist, judging by the disparity of Irish haplotypes. R1b1c7 is defined by the mutation called M222. As a process is under way which will change the name of R1b1c7 at least once, and possible several times in the future, and as the mutation which defines it will not change, R1b1c7 will be called R1b M222 in this report.

To make it easier to navigate through this report, it is divided into six parts, somewhat modified from the six divisions in the previous report. The first is this Introduction. The second is the Irish R1b M222 Section, the third is the Irish R1b Other Section, the fourth is the Mixed Haplogroups Section, the fifth is the Summary and the sixth is References. At the end of the Introduction is a listing of those 150 participants who tested at the 37-marker or higher level (plus 24 additional McTiernans who tested only to the 25-marker level) and the sections in which they can be found and the subgroups to which they have been assigned. This guide is provided so that the parts of the report of perhaps less interest may be skipped.

For general information on the Breifne Clans Project (BCP) with Family Tree DNA (FTDNA) go to the BCP section of the FTDNA website: http://www.familytreedna.com/surname_join.asp?code=T77392&special=Tree&projecttype=S.

For more specific information go to the FTDNA Breifne Clans Project (BCP) website: www.familytreedna.com/public/BreifneClans.

As the FTDNA BCP website does not yet have the capability of importing some of the illustrations and formatting, two other websites will present the reports with the illustrations and intended formatting:

<http://donohoeclan.org> and <http://www.odonoghue.co.uk/>

These last two websites are subscription websites, but you may read the BCP reports for free on both. On the Donohoe Clan Society website homepage, click on "About" and scroll to the bottom of the "History" page, where you can read some of the reports online or download any one of them as a PDF. On the O'Donoghue Society website, click on "Y-DNA Project" in the list on the left of the homepage, scroll to the bottom of the Y-DNA Project page and click on the dated "Results", scroll down the Y-DNA Results page to just beyond the middle to "Spreadsheet C" and click on "here" to download the PDF of the latest report.

If this report seems too lengthy or technical, you may want to go directly to

the summary at the end.

Participants								ST	T	%	GT	P%
Status	Origin	Haplogroup	Subclade	12	25	37	67					
Active	Irish	R1b	M222	8	8	37	21	72		39		32
Active	Irish	R1b	Other	16	17	70	8	111		60		50
Active	Irish	Non-R1b		2	0	0	1	3		2		1
									186			
Active	Non-Irish	R1b	M222	0	0	0	0	0		0		0
Active	Non-Irish	R1b	Other	1	0	4	3	8		47		4
Active	Non-Irish	Non-R1b		3	0	4	2	9		53		4
Total									17			
Active	No	Results	Yet	2	0	1	0	3				
Pending	Kit Not	Returned	Yet	2	0	15	0	17				
Total									20			
Grand	Total										223	
Removed	Irish	R1b	M222	2	0	1	0	3				
Removed	Irish	R1b	Other	0	0	5	1	6				
Removed	Irish	Non-R1b		0	0	0	0	0				
Removed	Non-Irish	R1b	M222	0	0	0	0	0				
Removed	Non-Irish	R1b	Other	0	0	1	0	1				
Removed	Non-Irish	Non-R1b		2	0	2	0	4				
Total									14			
Removed	Kit	Never	Returned	4	0	1	0	5				
Removed	Before	Results	Posted	1	0	0	0	1				
Total									6			
Grand	Total										20	
Active	Mitochon.							2				
Removed	Mitochon.							5				
Pending	Mitochon.	Kit Not Yet	Returned					1				
Total									8			

Table 1
Group Counts

As of late March, the BCP had 226 participants, up from 189 a year ago. Of those 226, kits have been returned for 205 individuals, of whom 150 have received Y-DNA test results at the 37-marker or 67-marker levels. An overall breakdown of all the kits and the groups represented, labeled “Group Counts”, is given in Table 1 above.

For the kits which have been returned, a breakdown of the surnames and number of representatives, labeled “Surname Counts”, is shown in Table 2. The column for “Breifne Lineages” shows the number of lineages for that surname where a member of the lineage can trace his ancestry back to a location in what was once the kingdom of Breifne (the present counties of Cavan and Leitrim and parts of adjoining counties).

Surname	# Partici- pants	Parts. At ≥37	Parts. At 67	# Linea- ges	Lins. At ≥37	Lins. At 67	Breifne Lins.	Breifne Lins. At ≥37
B.	1	1	0	1	1	0	0	0
Boylan	3	2	1	3	2	1	0	0
Brady	7	7	1	7	7	1	3	3
Breen-Browne	1	1	0	1	1	0	0	0
Brooks	1	1	0	1	1	0	0	0
Cain	1	1	1	1	1	1	0	0
Carnahan aka Hill	1	1	0	1	1	0	0	0
Causans	1	1	1	1	1	1	0	0
Clancy	5	3	0	5	3	0	2	2
Clark	2	1	1	2	1	1	0	0
O’Conor	2	2	2	2	2	2	0	0
Coogan	1	1	0	1	1	0	0	0
Corrigan	1	1	0	1	1	0	1	1
Coyne	1	1	1	1	1	1	0	0
McCreary aka Earle	1	1	0	1	1	0	0	0
Crowell	1	0	0	1	0	0	1	0
Cullivan	2	2	1	2	2	1	1	1
Curry	2	1	1	2	1	1	0	0
Dibblee	1	1	1	1	1	1	0	0
MacDonnell	1	1	1	1	1	1	0	0
O’Donnell	1	0	0	1	0	0	0	0
Donohoe	51	50	14	43	42	10	26	25
Early	1	0	0	1	0	0	0	0
Faughnan	4	3	0	4	3	0	3	3
FitzGerald	1	1	0	1	1	0	0	0
Flood	4	2	0	4	2	0	0	0
Flynn	3	1	0	3	1	0	0	0
Gaffney	2	1	0	2	1	0	1	1
Gallaughier	1	0	0	1	0	0	0	0
Golden	3	2	1	3	2	1	0	0
McGoldrick	1	1	0	1	1	0	0	0
McGovern	14	12	2	13	11	1	9	7
Guihan aka Wynne	1	1	0	1	1	0	1	1
McGuire	8	7	1	8	7	1	1	1
Jakubczak	1	1	0	1	1	0	0	0
Manross	1	1	0	1	1	0	0	0

McManus	1	1	0	1	1	0	0	0
Meehan	1	0	0	1	0	0	0	0
Moriarty	2	0	0	2	0	0	0	0
Morrow	2	1	1	2	1	1	0	0
Murphy	1	1	0	1	1	0	0	0
Murray	2	1	0	2	1	0	0	0
Newhall	1	1	0	1	1	0	0	0
Parrott	1	1	0	1	1	0	0	0
O'Reilly	8	7	0	8	7	0	5	5
Reynolds	4	4	1	4	4	1	1	1
O'Rourke	8	6	1	8	6	1	2	2
O'Shea	1	1	0	1	1	0	0	0
Smith	3	2	0	3	2	0	1	1
McTiernan	30	6	1	30	6	1	22	5
& McKiernan	4	3	0	4	3	0	4	2
Tristan	1	1	0	1	1	0	0	0
Totals: 52	203	150	34	195	140	29	78	61
Mar 07: 41	171	120	25	161	110	21	73	54
Mar 06: 30	98	75	0	90	68	0	44	41

Table 2
Surname Counts

The comparisons made in this report were confined to the 150 participants mentioned above who have received results for testing at least to the 37-marker level, because there is too much of a risk of misleading conclusions, such as false positives, from the testing at lower levels. One exception was made: The results of the large number (24) of McTiernans who tested only to the 25-marker level are displayed for their haplotype patterns.

The Y-DNA test results are *haplotypes*, which are Y-DNA profiles made up of a string of numbers, or values, which represent the number of repeats of short pieces of DNA. These short pieces of DNA are usually sequences that are half a dozen or fewer base-pairs long, and the repeats are usually right next to one another. The various places where these repeats occur are called DYS (STR) markers. DYS stands for DNA Y-chromosome Segment. STR is an acronym for Short Tandem Repeat. The two terms are two names for the same type of DNA pieces.

Haplogroups, ancient changes in DNA, each include plural haplotypes, as haplotypes change (mutate randomly) more quickly than haplogroups, so that the number of haplotypes increases within a haplogroup with the number of generations as mutations accumulate. Haplogroup designations given by

FTDNA in red are estimates by FTDNA based on haplotypes; haplogroups shown in green are the results of actual SNP Y-DNA tests (SNP = single nucleotide polymorphism). A SNP is where a change (mutation) has occurred in just a single base-pair, so that a test can show positive for the change (mutated, or 'derived state') or negative (unchanged, or 'ancestral state'). Haplotypes are characterized by changes in the number of repetitions of short strings of base-pairs, but haplogroups are based on actual changes in base-pairs.

National Geographic gives an overview, which may be seen on its "Atlas of the Human Journey – The Genographic Project" website¹, of how modern human haplogroups may have made their way into Europe, and thus toward Ireland. As National Geographic presents it, the R1 haplogroup [ancestral to the great majority of western Europeans] first appeared about 35,000 years ago in Central Asia. It moved further west with the Cro-Magnons, the name for the first large wave of modern humans to reach Europe, and gave rise to two further branches, R1a and R1b. About 30,000 years ago Haplogroup R1b [ancestral to the great majority of Irishmen] is thought to have appeared as the Cro-Magnon population carrying R1 was still making its way into Europe, while Haplogroup R1a [ancestral to a large percentage of Slavic peoples and to some Scandinavians, including many Vikings] is presented as having originated between 10,000 and 15,000 years ago on the Russian/Ukrainian steppes.

The Cro-Magnons, as identified by their material cultures, lived from about 35,000 years ago to about 10,000 years ago, and coexisted in certain times and places with Neanderthals,¹ who had already inhabited Europe for at least 100,000 years.² The culture of the Neanderthals prior to the arrival of the Cro-Magnons, the Mousterian culture, was significantly less technologically advanced or complex than that of the Cro-Magnons,³ although the intermediate culture called Chatelperronian has recently had reinforcement to the view that it was a Neanderthal culture.⁴ The Aurignacian culture (34,000 to 23,000 years ago), which the Cro-Magnons are thought to have brought with them into Europe, was characterized by fine tools of flint, antler, bone and ivory; jewelry of shells, teeth, stone beads and carved bone; and early cave paintings.¹ The stone tool called the burin, which allowed engraving, was invented during this period.⁵ As far back as 32,000 years ago the Cro-Magnon were creating the oldest objects of artistic expression in Europe or Asia; these included small figurines of people and animals in Austria and southern Germany, and the paintings of wooly rhinoceroses and bison on the walls of Chauvet Cave in France.⁶ The famous limestone "Venus" of Willendorf in lower Austria is dated to about 22,000-24,000 years ago⁷, and the "Venus" of Dolní_Věstonice in Moravia and a few other figurines found nearby, the oldest known ceramics in the world, are all dated to 27,000 to 31,000 years ago.⁸ Producing "Venus" figures of this type painted with red ochre, as well as stampeding herds of live animals to pitfalls and constructing huts with mammoth bones and hides, characterized the Gravettian culture (28,000 to 22,000 years ago).¹ Haplogroup I may have been brought into western Europe from eastern Europe by carriers of the Gravettian culture,⁹ and

these people left evidence in the area of the present Czech Republic that they were producing textiles at least 27,000 years ago, the world's oldest known evidence of weaving.¹⁰ Artifacts from the following European Solutrean culture (21,000 to 17,000 years ago) include the world's oldest eyed needles, made of bone, which may have been used to sew hides together, and tools of quartz and jasper¹. The succeeding Magdalenian culture (18,000 to 10,000 years ago) was characterized by engraved bone and antler tools, casting spears and harpoons, more established seasonal dwellings and larger populations.¹ This was the period of the domestication of the first animals 15,000-14,000 years ago, the dog and the reindeer.¹¹ Also, in this period of abundant local reindeer, bison and wild horse herds, there was sufficient leisure time for the dramatic polychrome images of the caves of Lascaux and Altamira to be created.¹

The National Geographic timeline regarding the arrival of the Cro-Magnon in Europe may have to be pushed back at least 5,000 years, though, as an Aurignacian figurine of a mammoth dated to 35,000 years ago, the oldest known intact ivory carving in the world, was found at Vogelherd Cave in the Swabian Jura of southwestern Germany last summer.¹² There is also recent evidence of an Aurignacian-like assemblage at Kostenki, thought to indicate that modern humans were living on the banks of the River Don in what is now Russia by 40,000 to 42,000 years ago.¹³

Humans probably ceased to be able to survive in northern Europe, including the British Isles region, more than 22,000 years ago due to the increasing cold of the last Ice Age, which eventually reached its maximum coldness about 18,000 years ago, when extensive glaciers formed in northern Europe.¹⁴ The large area these glaciers covered included most of the area which is now known as the British Isles but which was then a frozen bulge in the west of the European continent, with its remaining glacier-free area a polar desert. Those who did survive in Europe lived, except perhaps seasonally, in the remaining steppe-forest areas to the south of an extensive east-west belt of steppe-tundra stretching from the western European coast eastwards, north of the Pyrenees and Alps and south of the Baltic, across regions north of the Black and Caspian Seas and into Central Asia. The steppe-forest areas were found in the peninsulas of southern Europe (Iberia, Italy and the Balkans) and the southeast coast of the Black Sea, and were separated by large areas of semi-desert steppe stretching from southeastern Spain across south of the Alps down through the eastern Balkans to the Anatolian coastal areas, with a branch north of the Black Sea.¹⁵ These isolated groups became somewhat genetically distinct from one another due to thousands of years of separation. The I1a haplogroup, for instance, probably developed in the Iberian peninsula while the I1b haplogroup is thought to have originated in the Balkan peninsula.¹ As the glaciers slowly melted away people gradually returned to the north for good, beginning about 10,000 years ago, in the wake of increasing vegetation and of the relocation of the great game herds. Due to the melting of the ice caps and the consequent rising of sea levels, the land route to Ireland was cut off when Britain became an

island about 8,500 years ago.¹⁶ The first people to find their way into Ireland, after it became habitable again but still had glaciers in Ulster that were an extension of those covering Scotland, crossed over south of a great freshwater lake that is now the Irish Sea on a land bridge connecting southwestern England with southeastern Ireland, arriving about 9,000 years ago.¹⁷

As in the last report, when the Y-DNA profiles from the test results of the BCP participants are examined for evidence of patterns, a substantial number of the participants appear to fall into distinct groups. Some of these groups can be characterized by how well the haplotype patterns fit the pattern of the modal haplotypes of some haplogroups. At the top of charts below, above the results showing Y-DNA profiles of participants, are shown also the Super Western Atlantic Modal Haplotype (SWAMH)¹⁸ which is the modal haplotype for the general R1b haplogroup, and a hypothesized extension of the Irish Modal Haplotype (IMH; also known as the Ui Neill modal haplotype¹⁹) which is called the Northwest Irish Modal Haplotype (NWIMH)²⁰, and which is the modal haplotype for Haplogroup R1b M222. The SWAMH profile is an extension of FTDNA's 12-marker Western Atlantic Modal Haplotype (WAMH).

Several other modal haplotypes for Irish subgroups of R1b are being developed and the current versions are also given. These are the South Irish MH, identified in Feb 2006 by Ken Nordtvedt²¹ and given by Tim Desmond on Ysearch;²² the Irish Type III MH, which is apparently concentrated in Cos. Clare, Tipperary and Limerick, was identified in Apr 2006 by Ken Nordtvedt²³ and may be seen discussed on Dennis Wright's website;²⁴ the Colla Uais/Dalriadic MH, which is thought to be the signature of the founder of the kingdom of Oriel (Airghialla) just to the northwest of Breifne, and which was first announced in Feb 2004 by the Clan Donald DNA Project;²⁵ and the S28MH, the modal haplotype of R1b1c10, first presented by John McEwan in 2005,²⁶ a probable subgroup of which is discussed by Steven Colson.²⁷ Additionally given for Subgroup X4 is a modal haplotype for the R1a Somerled lineage, presented by Clan Donald.²⁸

A modal haplotype will usually be quite close to an ancestral haplotype and may even match exactly, but the two haplotypes are not identical in meaning. A modal haplotype is constructed by first looking over the array of haplotypes representing the individual participants in the group being considered, and then taking the modal (i.e., the most common) value of each marker. An ancestral haplotype is constructed by looking at three different groups, each group representing the descendants of one separate son of the ancestor, finding a modal haplotype for each of the three groups, and then constructing the ancestral haplotype by comparing the three modal haplotypes and taking the modal value of each marker. Only two groups are necessary as long as the two modal haplotypes match exactly. Charles F. Kerchner has described this approach as the "Triangulation Method for Deducing the Ancestral Haplotype in Y-DNA Surname Projects."²⁹

Two means of comparison were utilized in this project: looking for similarities

in the patterns of Y-DNA results profiles and calculating the probabilities of the number of generations back to the most recent common male-line ancestor (GMRCA).

For the first means of comparison, color-coded charts have been constructed to highlight patterns. In these comparison charts, where the values of markers for the modal haplotype of a cluster of interest differs from the SWAMH, the columns for these distinctive markers are colored one color where the values are distinctive, turquoise (light blue) where the values are the more common and widespread SWAMH values, and peach (light pinkish tan) where the values are different (aberrant or anomalous) from either of the above. See Chart 1 for the key to the complete color coding.

The second means of comparison was pursued as in the previous reports, with four time intervals being used. In order to estimate the probability over the four different time intervals of two individuals having a common ancestor in the male line, pair-wise comparisons were made by applying Family Tree DNA's "Time Probability" (FTDNATiP™) calculator (for a description of this calculator see http://www.familytreedna.com/trs_ftdnatip.html). For this report the time intervals again have been given in terms of generations rather than in terms of years. Since mutations changing a Y-DNA profile show up as a sharp step in going from one generation to the next, and since the number of years in a generation is vague and variable, it is more accurate to estimate these probabilities in terms of generations. However, it is of course of interest to relate the results of these calculations to intervals in terms of years. In the past FTDNA has used an estimate of 25 years per generation (ypg); studies at Trinity College Dublin have used a more conservative estimate of 30 ypg.

Table 2 gives some estimates for the four different time intervals used for the comparisons in this report. The A.D. dates are all approximate. In Report 3 the dates included a correction of 45 years as an estimate of the average age of the participants. Using the data from the 122 participants who have provided their years of birth, the average age of the participants in this project comes out to 59.345, so in this report a correction of 60 years is used.

Generations	25ypg	A.D.	27.5 ypg	A.D.	30 ypg	A.D.
≤24	660	~1350	720	~1290	780	~1230
≤34	910	~1100	995	~1010	1080	~930
≤42	1110	~900	1215	~790	1320	~690
≤50	1310	~700	1435	~570	1560	~450

Table 2
Time Intervals

A.D. dates for an intermediate estimate of 27.5 ypg are given in bold above, since that will be the approximation used in this report. So, in approximate terms, the first interval would be the present back to about 1290 A.D., the second would be from the present back to about 1010 A.D., the third would be from the present back to about 790 A.D., and the fourth would be from the present back to about 570 A.D. There would of course be an implied fifth time interval, that of the period more than 50 generations ago, or back before about 570 A.D. These intervals are all moved back to about ten years earlier than in the previous report due to the correction for the average age of the participants.

As in Report 3, one time interval (≤ 50 generations) goes back to a period definitely before the adoption of surnames in the Breifne area while remaining in the the historical era. A second (≤ 42 generations) was chosen to go back to a time before the birth of the eponymous ancestors of most of the families in the area. Another (≤ 34 generations) would date a common male-line ancestor to no further back than the era in which the earlier surviving surnames of the area were in the process of being adopted. The third interval (≤ 24 generations) is well within the time frame in which these earlier surnames were being used in the area. As different surnames had different histories, this arrangement suits some better than others. For instance, it would not seem to suit the surname McGoldrick particularly well, but the McGoldricks are traditionally a later subclan of the Clan Rourke, and are said to descend from Ualgharg Ua Ruairc (or O'Rourke), king of Breifne, who died in 1231.

As mentioned in the previous report, McEvoy and Bradley have formally demonstrated the correlation of Irish surnames in general with Y-DNA haplotypes in reflecting common male-line descent over the past 1,500 years.⁴ Table 3 below gives the origins of some of the surnames of Breifne, plus that of the O'Conors, overkings of Connacht (which included Breifne). Approximate (~) or known years of death (†) and approximate years of birth (*) are given for the ancestors whose forenames gave rise to the surnames.

Eponym	Year †	Year *	Surname in Gaelic	Surname Anglicized
Conchobar	971	~945	Ua Conchobair	O'Conor
Ruarc	898	~870	Ua Ruairc	O'Rourke
Raghallach	1014	~985	Ua Raghallaich	O'Reilly
Bradach	~1170	~1140	Mac Bradaich	McBrady
Samhradhan	~1150	~1120	Mac Shamhradhain	McGovern
Tighernan	~1100	~1070	Mac Thighernain	McKiernan
Donnchadh	< 1010	< 990	Ua Donnchadha	O'Donohoe
Ualgharg	1231	~1200	Mac Ualghairg	McGoldrick
Raghnall	~1105	~1075	Mac Raghnaill	McReynolds
Cernachan	929	~900	Ua Chernachain	O'Kernaghan
Fland	905	~875	Ua Flaind	O'Flynn
Muircertach	918	~890	Ua Muirchertaich	O'Moriarty
Fachtnan			Ua Fachtnain	O'Faughnan

Table 3
Origins of Some Breifne Surnames

The assumptions in this report of the number of generations with no common male-line ancestor are similar to the assumptions in Report 3, and the pairwise calculations are all at the level of a 37-marker analysis. The FTDNATiP calculator, in the case of an exact match or assuming just one generation of no common ancestor, initially displays probabilities of a common male-line ancestor in several intervals in terms of generations, with the longest going back to 24 generations ago. To get the FTDNATiP calculator to display probabilities going back to 34, 42 and 50 generations ago, assumptions of no common male-line ancestor for 10, 18 and 26 generations respectively are necessary.


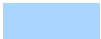







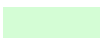






For each pairwise comparison, an assumption was made of the minimum number of generations with no common male-line ancestor necessary to reach a different (always greater) number of generations within which there would be a 99% probability of a common male-line ancestor. No more than 26 generations of no common male-line ancestor were assumed, however, which gave a display of the probabilities back as far as 50 generations ago. If the probability was less than 99.00% at 50 generations ago, the pair was not considered related for the purposes of this report.

Where the surname was the same (or variants of the same) but there was no known relationship, a minimum of four generations of no common male-line ancestor was assumed. Where the surnames were different but there was an indication of a link for the pair, a minimum of no common male-line ancestor for 26 generations (i.e. back about 715 plus 60 = 775 years, to about 1230 A.D.) was assumed.

. Where the comparison indicated a link and the surnames were different, additional calculations were done for the pair as though they were of the same surname, both to show the strength of the link and in case there had in fact been a more recent common male-line ancestor (which of course was the case for the McManus and the McDonaghy/Donohoe branches of the Maguires, as demonstrated in Report 2). The second result is given following a slash just after the first result.

Where separate lines of descent can be differentiated within a surname by profile patterns, these differentiations can for the most part be confirmed by the above-described calculations, which also place any evident relationship of a pair being compared within a time frame.

In the color coding of the profile patterns according to the key given in Chart 1 just below, the raspberry/dark pink and lemon yellow colors point out consistently distinctive values for a marker other than those distinctive values of a compared modal haplotype. Raspberry/dark pink is applied to the column for that marker only when there are at least four lineages represented in a line and only across other lines within the same surname within a subgroup when the distinctive value is the modal value for that group of other lines. Lemon yellow is applied only when there are at least four lineages represented in a line of each of at least two surnames within a subgroup.

	Link at ≤ 24 generations		Marker Equals SWAMH Value As Opposed to Non-SWAMH Value
	Link at ≤ 34 generations		Marker Equals NWIMH Value As Opposed to SWAMH Value
	Link at ≤ 42 generations		Marker Equals SIMH Value As Opposed to SWAMH Value
	Link at ≤ 50 generations		Marker Equals ITIIMH Value As Opposed to SWAMH Value
	Known relationship		Marker Equals CUDMH Value As Opposed to SWAMH Value
			Marker Equals S28MH Value As Opposed to SWAMH Value
			Marker Equals ONMH Value As Opposed to SWAMH Value
			Marker Equals SLMH Value As Opposed to SWAMH Value
			Non-SWAMH Marker Value Consistent Across $\geq 80\%$ of a Line and $\geq 50\%$ of Any Additional Lines
			Non-SWAMH Marker Value Consistent Across $\geq 80\%$ of each of ≥ 2 Surnames
			Anomalous Marker Value

Links Color Code

Patterns Color Code

Chart 1
Key to Color Coding

The Y-DNA test results (for patterns) and the FTDNATiP calculation results (for links) for the members of groups were color coded according to the key in Chart 1 above.

Following is a table (Table 4) showing which of the next three sections each participant falls into. The O-type and Mac-type prefixes have been ignored in the alphabetizing. The McTiernans who tested at the 25-marker level but no higher are included because there is a large enough number of them to contribute to clarifying the patterns of the initial portions of the McTiernan profiles; they will be found only in the following table (Table 4) and in the next two sections in the charts showing Names & Origins and in the charts showing DNA Results & Patterns.

Kit	Code	Name	Section	Subgroup
6292	A-B	B., A.	Irish R1b M222	AX
78819	C-B	O'Baoigheallain, Ciaran	Irish R1b Other	B3, O1
46952	MWB	Boylan, Michael William	Irish R1b Other	X1
33734	B-B	Brady, B.	Irish R1b Other	C1
43749	EJCB	Brady, Dr. Edward Joseph <u>Colm</u>	Irish R1b Other	B4
63879	J-B	Brady, J.	Irish R1b Other	B4
64487	JPB	Brady, John Peter	Irish R1b Other	B4
64488	PEB	Brady, Canon Patrick Edward	Irish R1b Other	B4
40355	PJB	Brady, Patrick James	Irish R1b Other	B4
89273	TJB-B	Breen-Browne, Trevor James	Irish R1b Other	X1
89279	JCB	Brooks, Jeffery Clay	Mixed Haplogroups	X4
13875	MAC	Cain, Marshall Allen	Irish R1b Other	X1
94897	KJH	Carnahan aka Hill, Kenneth James	Irish R1b M222	AX
73518	AVdeC	Causans, Count Aymar de Vincens de	Mixed Haplogroups	X3
103604	WGC	Clancey, William George	Irish R1b M222	AX
104283	PAC	Clancy, Paul Augustine	Irish R1b M222	AX
104281	WJC	Clancy, William Joseph	Irish R1b M222	AX
82606	OIC	Clark, Obed Ithel, Jr.	Irish R1b Other	X3
65969	RTO'C	O'Connor, Roland Thomas	Irish R1b M222	AX
64493	KDO'C	O'Conor, Dr. Kieran Denis	Irish R1b M222	AX
75557	JJC	Coogan, James Joseph	Irish R1b M222	AX
43739	PJC	Corrigan, Canon Patrick Joseph	Irish R1b Other	O1
N32460	REC	Coyne, Robert Edward	Irish R1b M222	AX
		McCreary aka Earle, see Earle		
65836	JPC	Cullivan, Joseph Patrick	Irish R1b M222	AX
89281	T-C	Cullivan, Terry	Irish R1b M222	AX, X1
N3035	JTC	Curry, James Timothy	Irish R1b M222	AX
11741	TWD	Dibblee, Thomas Wilson, Jr.	Mixed Haplogroups	X4
82395	BED	Donahue, Bernard Edward, Jr.	Irish R1b M222	A1
56053	JFD	Donahue, James Francis, III	Irish R1b Other	B1
19591	JMD2	Donahue, Joseph Michael	Irish R1b M222	A1
42569	JPD2	Donahue, Joseph Patrick	Irish R1b M222	A1
82388	KCD	Donahue, Kevin Charles	Irish R1b M222	A1
79625	M-D2	Donahue, Michael	Irish R1b M222	A1
61435	RED	Donahue, Robert Edmund	Irish R1b Other	B4
32877	SCD	Donahue, Sean Carlson	Irish R1b M222	A1
19590	TRD	Donahue, Thomas Reilly, Jr.	Irish R1b M222	A1
64494	McDG	MacDonnell, Count Randal Christopher, MacDonnell of the Glens	Mixed Haplogroups	X4
22522	BAO'D	O'Donoghue, Brendan Anthony	Irish R1b Other	X1
43737	CJAO'D	O'Donoghue, Charles James Alphonsus	Irish R1b Other	B1
35979	GLD	Donoghue, George Lanno	Irish R1b Other	B4
26177	JLO'D	O'Donoghue, John LiPomi	Irish R1b Other	B1
103142	NAGO'D	O'Donoghue, Nicholas Alexander Gordon	Irish R1b Other	O1
43754	BMD	Donohoe, Bernard Michael ("Brian")	Irish R1b Other	O1
43747	BGD	Donohoe, Brian Gerard	Irish R1b Other	B1
14007	BTD	Donohoe, Brian Thomas	Irish R1b Other	B1
73523	DPD	Donohoe, Damien Peter	Irish R1b Other	B1
43752	EJD	Donohoe, Edward Joseph ("Eamonn")	Irish R1b Other	O1
82458	EVD	Donohoe, Eugene Valentine	Irish R1b Other	B1
38187	HJD	Donohoe, Hugh Joseph, Jr.	Irish R1b Other	O1
14009	JHD	Donohoe, James Hugh	Irish R1b Other	B1
43742	JMD1	Donohoe, James Martin	Irish R1b Other	O1

35470	JMD3	Donohoe, James Mel	Irish R1b Other	O1
N52872	JWD	Donohoe, James Willard	Irish R1b M222	A1
43745	JBD	Donohoe, John Brendan	Irish R1b Other	B1
22934	JJD	Donohoe, John Joseph	Irish R1b Other	B4
21575	JPD4	Donohoe, John Patrick	Irish R1b Other	O1
43736	JPD1	Donohoe, John Paul ("Sean")	Irish R1b Other	B1
11571	JAD1	Donohoe, Joseph Augustine, V	Irish R1b M222	A1
19051	LCD	Donohoe, Leonard Charles	Irish R1b Other	B1
37680	MJMD	Donohoe, Martin James Michael	Irish R1b Other	O1
14012	MJD	Donohoe, Michael Joseph	Irish R1b Other	B1
14008	M-D1	Donohoe, Michael nmn	Irish R1b Other	O1
43748	MRD	Donohoe, Michael Robert	Irish R1b Other	B1
34624	PJD3	Donohoe, Patrick Joseph, III	Irish R1b Other	B1
43741	PJD2	Donohoe, Patrick Joseph	Irish R1b Other	O1
43753	PJD4	Donohoe, Patrick Joseph	Irish R1b Other	O1
19050	RDD	Donohoe, Richard Dibblee	Irish R1b M222	A1
22521	RPD	Donohoe, Robert Paul	Irish R1b M222	A1
43738	SFD	Donohoe, Sean Francis	Irish R1b Other	B1
16340	WJD	Donohoe, William John, Jr.	Irish R1b M222	A1
14010	BJD	Donohue, Bernard Joseph ("Brian")	Irish R1b Other	B4
26540	ECD	Donohue, Elmer Charles ("Ed")	Irish R1b Other	B1
11877	JAD2	Donohue, James Aloysius	Irish R1b M222	A1
20744	MHD	Donohue, Michael Hills	Irish R1b M222	A1
28514	PJD1	Donohue, Paul James	Irish R1b Other	B1
23491	RJD	Donohue, Raymond Joseph	Irish R1b Other	B1
19592	TED	Donohue, Rev. Thomas Edward	Irish R1b M222	A1
84595	W-D	Donohue, William	Irish R1b M222	A2
60163	DMcCE	McCreary aka Earle, David	Irish R1b Other	X1
25839	JPF	Faughnan, Joseph Patrick	Irish R1b M222	A2
25638	MFF	Faughnan, Michael Francis, Jr.	Irish R1b M222	A2
14141	V-F	Faughnan, Victor	Irish R1b M222	A2
89278	AJFG	FitzGerald, Sir Adrian James, Bart., Knight of Kerry	Mixed Haplogroups	X3
58452	JDF	Flood, James Davis	Mixed Haplogroups	X1
42035	KPF	Flood, Kevin Patrick	Mixed Haplogroups	X1
N20731	JJF	Flynn, John Joseph	Irish R1b M222	A-
38409	SEMcG1	McG., S. E.	Irish R1b M222	A2
47681	ESG	Gaffney, Eugene Spencer	Mixed Haplogroups	X1
35946	JJG	Golden, James Joseph	Irish R1b M222	AX
N18546	TJG	Golden, Thomas Joseph, III	Irish R1b M222	AX
43750	F-McU	McGoldrick, Francis nmn	Irish R1b M222	AX
40445	BMMcG	McGovern, Bernard Maurice	Irish R1b M222	A2
37762	BDMcG	McGovern, Bruce Duane	Irish R1b M222	A2
25890	CGMcG	McGovern, Clovis Gene	Irish R1b M222	A2
22897	DSMcG	McGovern, Donald Scott	Irish R1b M222	A2
34985	EOMcG	McGovern, Edward Owen	Irish R1b M222	A2
35254	JLMcG	McGovern, Joseph Ligouri	Irish R1b M222	A2
64486	MJMcG	McGovern, Michael Joseph	Irish R1b M222	A2
43968	PJMcG2	McGovern, Peter James	Irish R1b M222	A2
39335	PJMcG1	McGovern, Phillip James	Irish R1b M222	A2
30369	RAMcG1	McGovern, Rory Alan	Irish R1b M222	A2
N8216	TFMcG	McGovern, Thomas Francis	Irish R1b M222	A2
		Guihan aka Wynne, see Wynne		
36359	AGMcUr	Maguire, Arlan George	Irish R1b Other	O1
N30642	BJMcUr	Maguire, Brian James	Irish R1b Other	O1
36996	CLMcUr	McGuire, Chanse Lang	Irish R1b Other	O1

36994	RDMcUr1	McGuire, Richard Duane	Irish R1b Other	O1
19836	RDMcUr2	McGuire, Robert Duane	Irish R1b Other	X1
37023	WFMcUr	McGuire, William Francis	Irish R1b Other	O1
50423	WAMcUr	McGwier, Willoughby Augusta	Irish R1b Other	O1, X1
105076	D-J	Jakubczak, Donald	Mixed Haplogroups	X4
43751	A-K	Kiernan, Andrew nm	Irish R1b Other	B2
43740	FJMcK	MacKiernan, Most Rev. Francis Joseph, late Bishop of Kilmore	Irish R1b M222	A2
64491	KJMcK	McKiernan, Kevin Michael	Irish R1b M222	A2
34129	JLM	Manross, John Lawrence	Irish R1b M222	AX
10332	MMcMnB	McManus Broman, Morgan Mats Erik	Irish R1b Other	O1
68867	GJM	Morrow, Gordon Jack	Mixed Haplogroups	X4
91873	TTJM	Murphy, Thomas T.J.	Mixed Haplogroups	X1
19593	MLM	Murray, Michael Leo	Mixed Haplogroups	X4
19594	GAN	Newhall, George Aylmer, III	Mixed Haplogroups	X4
43755	TJP	Parrott, Timothy John	Mixed Haplogroups	X3
64489	HJO'R	O'Reilly, Hugh James	Irish R1b M222	A2
N8271	JFO'R1	O'Reilly, John Francis	Irish R1b M222	A2
52528	JLR	Reilly, John Lawrence	Irish R1b M222	A2
64492	MJR	Reilly, Michael Joseph	Irish R1b M222	A2
43746	NAR	Reilly, Noel Anthony	Irish R1b M222	A2
36683	RWO'R	O'Reilly, Robert William	Irish R1b Other	B4
94845	LAR	Reily, Lawrence Allan	Irish R1b Other	X1
81672	GNR	Reynolds, Glenn Newton	Irish R1b Other	X1
39183	JJR	Reynolds, John Joseph	Irish R1b Other	B3
N2316	SHPR	Reynolds, Steven Huntley Patrick	Irish R1b Other	B3
12835	WAMcR	McReynolds, William Andrew	Mixed Haplogroups	X1
67651	WRR	Roark, William Roger	Irish R1b Other	B3
68210	RTR	Rork, Robert Terry	Irish R1b Other	B3
73522	JFO'R2	O'Rourke, James Francis	Irish R1b Other	B3
N30440	MDO'R	O'Rourke, Michael D.	Irish R1b Other	B3
90084	M-O'R	O'Rourke, Michael	Irish R1b Other	B3
N36071	PJO'R	O'Rourke, Peter Joseph	Irish R1b Other	B3
91857	H-O'S	O'Shea, Henry	Irish R1b Other	X1
63408	KES	Smith, Kenneth Edward	Irish R1b Other	B3
32550	M-S	Smith, M.	Irish R1b M222	AX
2145	B-McT	McTernan, Bernard (25)	Irish R1b Other	B2
3435	G-McT1	McTernan, Geoffrey (25)	Irish R1b Other	B2
1010	JPMcT	McTernan, James Patrick	Irish R1b M222	A1
635	J-McT1	McTernan, John nm	Irish R1b Other	B2, B3
637	JCMcT	McTernan, John C. (25)	Irish R1b M222	A1
673	M-McT1	McTernan, Mark (25)	Irish R1b Other	B2
640	T-McT	McTernan, Tom (25)	Irish R1b Other	B2
17363	TMMcT	McTernan, Thomas Michael (25)	Irish R1b Other	B2
19343	A-McT	Tiernan, Adam (25)	Irish R1b Other	B2
638	C-McT1	McTiernan, Charles (25)	Irish R1b M222	A1
52762	DJT	Tiernan, David John Brendan	Irish R1b Other	B2
5450	D-McT	McTiernan, Douglas (25)	Irish R1b Other	B2
8723	E-McT	McTiernan, Ed (25)	Irish R1b M222	A1
9498	G-McT3	McTiernan, Gene (25)	Irish R1b Other	B2
8724	G-McT2	McTiernan, Gus (25)	Irish R1b M222	A1
646	J-McT2	McTiernan, Jim (25)	Irish R1b Other	B2
9497	J-McT5	McTiernan, Jim (25)	Irish R1b M222	A1
31885	JWMcT	McTiernan, John W. (25)	Irish R1b M222	A1
1028	J-McT4	McTiernan, Joseph (25)	Irish R1b M222	A1
21151	LVMcT	McTiernan, Leo Vincent	Irish R1b M222	A1

3713	M-McT3	McTiernan, Martin (25)	Irish R1b Other	B2
3436	M-McT2	McTiernan, Michael (25)	Irish R1b Other	B2
5449	M-McT4	McTiernan, Michael (25)	Irish R1b Other	B2
674	MPMcT	McTiernan, Michael Patrick	Irish R1b Other	B1, B2, B3
73917	PEMcT	McTiernan, Paul Edwin (25)	Irish R1b Other	B2
636	PEMcT	McTiernan, Phelim	Irish R1b M222	A1
1029	R-McT	MacTiernan, Rory (25)	Irish R1b Other	B2
639	S-McT1	McTiernan, Scott (25)	Irish R1b Other	B2
5451	S-McT2	McTiernan, Scott (25)	Irish R1b M222	A1
89275	JdeT	Tristan, Count Jacques de	Mixed Haplogroups	X3
31886	C-McT2	McTurnan, Chris (25)	Irish R1b Other	B2
N2648	M-W	Wynne aka Guihan, Michael	Irish R1b Other	X1

Table 4
List of Participants Included in This Report
and the Sections and Subgroups in Which They Appear

Irish R1b M222 Section

Overview

R1b M222 is a haplogroup defined just over two years ago. A portion of the haplotype profile was identified as distinctive in Feb 2006 by the Trinity College Dublin team of Moore, McEvoy, Cape, Simms and Bradley, who called it the Irish Modal Haplotype (IMH).³⁰ From an examination of an array of e-published haplotype profiles, David Wilson developed a hypothesized extension of this modal haplotype in Mar 2006, which he called the Northwest Irish Modal Haplotype (NWIMH).³¹ R1b M222 is the subclade of R1b that shows the derived state for the M222 SNP (i.e., shows positive for the M222 change). The correlation of the NWIMH profile with this SNP was first proposed by Wilson, who had a sample of DNA showing the NWIMH tested by EthnoAncestry for M222 and announced the positive result in Mar 2006.³² Sims, Garvey & Ballantyne formally demonstrated that R1b M222 is differentiated by the derived state of M222 in a paper submitted in May and published in Aug 2006.³³

Haplogroup R1b M222 is a subclade (or offshoot) of the widespread (at least in Western Europe) R1b haplogroup. R1b seems to have arisen in a population which survived the last glaciation in the Iberian *refugium* south of the Pyrenees, and to have become common there through chance survival either in a chronically small population or during population bottlenecks, through a process called random drift, in which drastic reduction(s) in population size causes random loss(es) of genetic diversity. It then spread through Western Europe as groups of hunter-gatherers from the Iberian refuge followed the spread of plants and the movement of game herds northward as lands became warmer with the gradual retreat of the glaciers, starting about 10,000 years ago. The R1b M222 subclade has been found to be prevalent among subjects with surnames associated with the Ui Neill by Moore, McEvoy et al.³⁰, and among participants in various genetic genealogy projects who have surnames particularly associated with northwestern Ireland but also with lowland Scotland, while being relatively rare elsewhere, by Wilson³², and so is thought to have originated in Ireland. It has not been established when it arose, but that event likely would have happened in the period 1,500 to 10,000 years ago. The M222 mutation likely occurred in a man whose haplotype had already diverged significantly from the SWAMH. Substantiation of this pre-existing divergence would be found if a cluster of haplotypes eventually turns up which is negative for M222 but approaches the NWIMH (R1b M222 Modal Haplotype).

The R1b M222 profiles differ from the SWAMH in the values of all or most of nine particular markers out of the first 37 markers in the Family Tree DNA (FTDNA) sequence, plus two additional markers among these first 37 which are more variable but still of interest. In these comparison charts, the columns for these distinctive markers are colored lavender (light purple) where the values are the NWIMH (R1b M222 MH) values, and turquoise (light blue) where the values

are the more common and widespread SWAMH values, and peach (light pinkish tan) where the values are different (aberrant or anomalous) from either of the above. See Chart 1 for the key to the complete color coding.

Group A: Mixed Breifne Surnames

The Mixed Breifne Surnames Section is made up of 58 participants at the 37-marker level or higher, representing 50 independent lineages and 17 surnames. O'Connor would not be a Breifne surname, but is included as a check because by tradition the major lineage it represents is of the same fifth-century origin as the lineages represented by many Breifne surnames. One or two of the singleton names may also not be Breifne surnames. Eight participants at the 25-marker level, representing eight independent McTiernan lineages, were also included to establish a 25-marker modal for this surname in this section.

Most of the participants in this section so far are Donohoes (16, representing 11 independent lineages) and McGoverns (12, also representing 11 lineages), with the Donohoes falling into three lines (with three unassigned Donohoe participants) and the McGoverns into two (with two unassigned McGovern participants). There are a few (three to five each) McTiernans, O'Reillys, Faughnans, McGoldrick/Goldens and Clancys; two McKiernans, two O'Conors, two Cullivans and six other surnames with a single representative each. Charts 2-4 below show the names and origins of the members of this section.

Subgroup A1: Donohoe-McTiernan Cluster

Chart 2 below shows the names and origins for the members of this subgroup. As can be seen, few of the Donohoes but most of the McTiernans can trace their lineages back to Breifne.

Code	Kit	Breifne Clans Project		H	Family Residential ID		Townland	Year	Family Origins in Ireland		
		Subgroup A1:	g	Address	State/Prov. /County	From			Civil Parish	Barony	County
		Donohoe-McTiernan Cluster	r								
		Mixed Breifne Surnames	p								
		Haplogroup R1b1 M222									
		Donohoe Line Dn-A1a									
JAD1	11571	Joseph A. Donohoe V	R1b1c7	"Holm Grove"	California	1868	unknown	≤1793	unknown	unknown	Cavan
RDD	19050	Richard Dibblee Donohoe	R1b1c7	"Holm Grove"	California	1868	unknown	≤1793	unknown	unknown	Cavan
WJD	16340	William John Donohoe Jr.	R1b1c7	"Holm Grove"	California	1868	unknown	≤1793	unknown	unknown	Cavan
RPD	22521	Robert Paul Donohoe	R1b1c7	"Holm Grove"	California	1868	unknown	≤1793	unknown	unknown	Cavan
SCD	32877	Sean Carlson Donahue	R1b1c7	Camden	New Jersey	~1880	unknown		unknown	unknown	unknown
KCD	82388	Kevin Charles Donahue	R1b1c7	Camden	New Jersey	~1880	unknown		unknown	unknown	unknown
		Donohoe Line Dn-A1b									
JPD2	42569	Joseph Patrick Donahue	R1b1c7	Halifax	Nova Scotia	1841	unknown	≤1836	unknown	unknown	unknown
BED	82395	Bernard Edward Donahue Jr.	R1b1c7	Philadelphia	Pennsylvania	≤1845	unknown	~1817	unknown	unknown	unknown
JAD2	11877	James Aloysius Donohue	R1b1c7	Philadelphia	Pennsylvania	~1881	unknown	~1862	unknown	unknown	unknown
MHD	20744	Michael Hills Donohue	R1b1c7	Hudson	Wisconsin	?	unknown	≤1791	unknown	unknown	unknown
		Donohoe Line Dn-A1c									
TRD	19590	Thomas Reilly Donahue Jr.	R1b1c7	Kilmuckridge	Wexford	≤1798	Kilmuckridge	≤1798	Kilmuckridge	Ballaghkeen	Wexford
JMD2	19591	Joseph Michael Donahue	R1b1c7	New Hope	Kentucky	≤1785	unknown		unknown	unknown	unknown
TED	19592	Thomas Edward Donohue	R1b1[c7]	New Hope	Kentucky	≤1785	unknown		unknown	unknown	unknown
		Donohoe Line Dn-Axa Unass.									
M-D2	79625	Michael Donahue	R1b1	Cork	Cork	≤1839	Cork	≤1839	unknown	Cork	Cork
JWD	N52872	James Willard Donohoe	R1b1c7	C. Geoghegan	Westmeath	≤1825	Castletown G.	≤1825	Castletownkindalen	Moycashel	Westmeath
W-D	84595	William Donohue	R1b1c7	Cook Co.	Illinois	1850s	unknown	≤1850	unknown	unknown	Roscommon?
		McTiernan Line Tg-A1a									
LVMcT	21151	Leo Vincent McTiernan	R1b1c7	Ummeryroe	Sligo	~1800	Ummeryroe	~1800	Shancough	Tirerrill	Sligo
P-McT	636	Phelim McTiernan	R1b1	Ummeryroe	Sligo	~1789	Ummeryroe	~1789	Shancough	Tirerrill	Sligo
JPMcT	1010	James Patrick McTernan	R1b1	Tullycorka	Leitrim	<1800	Tullycorka	<1800	Inishmagrath	Drumahaire	Leitrim
JCMcT	637	John C. McTernan	R1b1c7	Corratawy	Leitrim	~1814	Corratawy	~1814	Killarga	Drumahaire	Leitrim
G-McT2	8724	Gus McTiernan	R1b1	Not Stated	Not Stated		unknown		unknown	unknown	unknown
C-McT1	638	Charles McTiernan	R1b1c7	Knocks/Glebe	Leitrim	~1779	Knocks/Glebe	~1779	Drumreilly	Carrigallen	Leitrim
E-McT	8723	Ed McTiernan	R1b1c7	Tulcon	Leitrim	<1846	Tulcon	<1846	Cloon	Mohill	Leitrim
J-McT5	9497	Jim McTiernan	R1b1	Tap	Sligo	1813	Tap	1813	Shancough	Tirerrill	Sligo
JWMcT	31885	John W. McTiernan	R1b1	Not Stated	Leitrim	>1840]	unknown	>1840]	unknown	unknown	Leitrim
J-McT4	1028	Joseph McTiernan	R1b1c7	Greaghnalogh	Leitrim	~1780	Greaghnalogh	~1780	Inishmagrath	Drumahaire	Leitrim
S-McT2	5451	Scott McTiernan	R1b1	Not Stated	Leitrim	~1815	unknown	~1815	unknown	unknown	Leitrim

The following charts, Charts 3 & 4, show the Y-DNA profiles for all the Donohoe and McTiernan participants of this group whose results are in and who have tested at the 37-marker level or higher, plus eight McTiernans who tested only to the 25-marker level.

		F	H	Markers																																							
Breifne Clans Project		a	a	3	3	1	3	3	3	4	3	4	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	C	4	4		
Mixed Breifne Surnames		m	p	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	4	3	4	4	6	6	6	6	6	0	A	C	C	5	0	7	7	D	D	4	3			
Subgroup A1 Part 1		l	l	3	0		1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8			
		l	o					a	b				i		ii		a	b							a	b	c	d		A													
		y	g		3																																			a	b		
		r	g		9																																						
Kit/ID	Code	o	o																											H	l	l											
		r	u																																								
FTDNA		p	p	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	26	27	28	29	30	31	32	33	34	35	36	37			
Modal Haplotypes		L																																									
[not characterized]	S28MH	l	R1b1c10	13	24	14	10	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	30	15	15	16	17	11	11	19	23	16	15	19	17	36	38	12	12			
Colla Uais Dalriadic	CUDMH	n	R1b1c*	13	24	14	10	11	14	12	12	12	13	13	30	18	9	10	11	11	25	15	19	30	15	15	17	17	11	12	19	24	15	15	18	17	37	38	12	12			
Irish Type III	IT III MH	e	R1b1c*	13	24	14	11	11	14	12	12	11	13	13	29	17	8	9	11	11	25	15	19	29	13	13	15	17	11	11	19	23	15	15	18	17	36	38	12	12			
Southern Irish	SIMH		R1b1c*	13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	37	38	13	12			
Super W Atlantic	SWAMH		R1b1c	13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	37	38	12	12			
Irish TCD	IMH		R1b1c7	13	25	14	11			12	12	13	14	29								15						11												12			
Northwest Irish	NWIMH		R1b1c7	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12			
Donohoe		Dn-A1a																																									
11571	JAD1	1	R1b1c7	13	25	14	12	11	13	12	12	11	14	14	30	17	9	10	11	11	25	16	18	29	16	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12			
19050	RDD	1	R1b1c7	13	25	14	11	11	13	12	12	11	14	14	30	17	9	10	11	11	25	16	18	29	16	16	17	19	11	11	19	23	17	16	18	17	37	39	12	12			
16340	WJD	1	R1b1c7	13	25	14	11	11	13	12	12	11	14	14	30	17	9	10	11	11	25	16	18	29	16	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12			
22521	RPD	1	R1b1c7	13	25	14	11	11	13	12	12	11	14	14	30	17	9	10	11	11	25	16	18	29	16	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12			
32877	SCD	2	R1b1c7	13	25	14	11	11	13	12	12	12	14	14	30	17	9	10	11	11	25	16	18	29	15	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12			
82388	KCD	2	R1b1c7	13	25	14	11	11	13	12	12	12	14	14	30	17	9	10	11	11	25	16	18	29	15	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12			
Donohoe		Dn-A1b																																									
42569	JPD2	1	R1b1c7	13	25	14	12	11	13	12	12	12	13	14	28	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	19	17	38	39	12	12			
82395	BED	2	R1b1c7	13	25	14	10	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	10	11	19	23	17	16	19	18	37	39	12	12			
11877	JAD2	3	R1b1c7	13	25	14	10	11	13	12	12	13	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	10	11	19	23	17	16	18	18	37	37	12	12			
20744	MHD	4	R1b1c7	13	25	14	11	11	13	12	12	11	13	14	29	17	9	10	10	11	25	15	18	30	15	16	16	16	11	11	19	24	17	16	20	17	37	39	12	12			
Line Modal		Donohoe																																									
	Don-A1bMH	√																																									

Chart 3
MBS: Subgroup A1 Part 1
Haplogroup R1b1 M222
Donohoe – McTiernan Cluster
Results & Patterns

Kit/ID	Code	F	Hgrp	Breifne Clans Project MBS: A1 D&T Part 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Chart 4
MBS: Subgroup A1 Part 2
Haplogroup R1b1 M222
Donohoe – McTiernan Cluster
Results & Patterns

The columns for the markers where the R1b M222 modal haplotype value characteristically deviates from the SWAMH value are colored lavender/light purple. These values will be referred to as the characteristic R1b M222MH values. The values entered are shown against that color if they are the R1b

M222MH values, against turquoise/light blue if they are the SWAMH values and against peach/light orange-tan if they are some other variant value.

The pattern of Donohoe Line Dn-A1c resembles that of McTiernan Line Tg-A1a more than it resembles either of the other two Donohoe lines in this group. That suggests, as noted in the last report, that either these Donohoes may be a subclan of these McTiernans, or vice-versa, or both may be subclans of an unidentified clan.

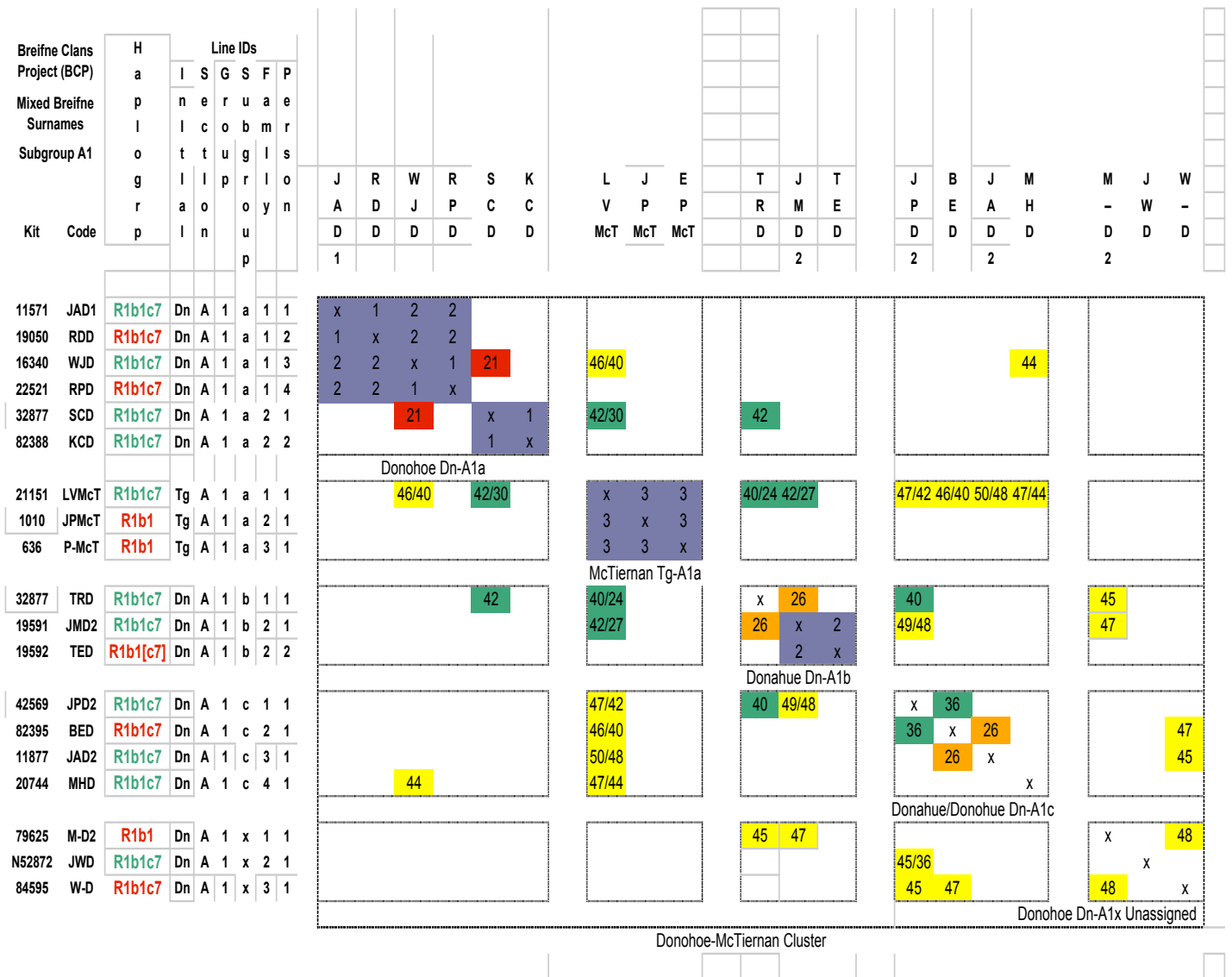


Chart 5
MBS : Subroup A1
Haplogroup R1b1 M222
Donohoe – McTiernan Cluster
Generations to MRCA at 99% Probability

As mentioned above, the FTDNATiP calculator was used to get an estimate at the 99% probability level of the number of generations back to the most recent common male-line ancestor (GMRCA) of whichever two participants were being compared. Where there was a group of known relationship (a family group), one of the group was selected to represent the lineage in making the pairwise calculations. This was the one closest to a modal haplotype, or if there were only two in the family group then the one with the strongest connections to the general group.

The relationships, or links, of course varied in strength among the pairs being compared and were color coded accordingly. Where the two in the pair are of different surname, the second value after the slash represents the value for the GMRCA found before the minimum of 26 generations of no common male-line ancestor was applied because of the difference in surname (i.e., this second value is the value for the GMRCA found when only the minimum number of generations of no common male-line ancestor necessary to get a value at the 99% probability level was applied).

In Chart 4 above, it can be seen that the participants of this subgroup may be placed fairly well into four lines or core areas. Lines Dn-A1a, Dn-A1b and Dn-A1c include Donohoes and Line Tg-A1a includes McTiernans. The three McTiernans of Line Tg-A1a have all been discovered in the last year to be related by a paper trail and so all three of them belong to just a single lineage and are now so treated here. These Donohoe lines and the McTiernan line all display some interlinking with each other mostly at the weak (yellow) levels but also with a few links at the moderate (green) level. If the McTiernan line was treated as a Donohoe surname line there would be more moderate to very strong links with the three Donohoe lines. The fifth “line”, Dn-AXa Unassigned, shows a few weak internal and external (with Lines Dn-A1b and Dn-A1c) links, but is placed here mainly because of the profile pattern and surname.

Subgroup A2: O'Reilly-McGovern Cluster

Chart 6 below shows the names and origins for the members of this subgroup. All of the O'Reillys, all of the Faughnans and about half of the McGoverns here trace their lineages back to Breifne.

Breifne Clans Project			H	Family Residential ID			Family Origins in Ireland				
Subgroup A2:			g	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County
Reilly-McGovern Cluster			r								
Code	Kit	Mixed Breifne Surnames	p								
		Haplogroup R1b1 M222									
		Reilly Line Rg-A2a									
NAR	43746	Noel Anthony Reilly	R1b1c7	Cranaghan	Cavan	~1760	Cranaghan	~1760	Tomregan	Loughtee Lwr	Cavan
HJO'R	64489	Hugh James O'Reilly	R1b1c7	Milltown	Cavan	~1770	Milltown	~1770	Drumlane	Loughtee Lwr	Cavan
MJR	64492	Michael Joseph Reilly	R1b1c7	Brockly	Cavan	≤1916	Brockly	≤1916	Annagh	Tullygarvey	Cavan
JLR	52528	John Lawrence Reilly	R1b1c7	Corohopel	Leitrim	≤1871	Corohopel	≤1871	Drumreilly	Drumahaire	Leitrim
JFO'R	N8271	John Francis O'Reilly	R1b1c7	Tonagh	Cavan	≤1841	Tonagh	≤1841	Castleterra	Loughtee Up	Cavan
		McGovern Line Sm-A2a									
BDMcG	37762	Bruce Duane McGovern	R1b1c7	Jones Co.	Iowa	>1860	Newry	≤1830	Newry	Newry	Down
SEMcG	38409	S. E. McG.	R1b1	Sweetwood	Leitrim	≤1831	unknown	~1792	unknown	unknown	unknown
RAMcG	30369	Rory Alan McGovern	R1b1	Sweetwood	Leitrim	≤1831	unknown	~1792	unknown	unknown	unknown
PJMcG2	43968	Peter James McGovern	R1b1	Gortletteragh	Leitrim	≤1813	Gortletteragh	≤1813	Cloone	Mohill	Leitrim
		McGovern Line Sm-A2b									
DSMcG	22897	Donald Scott McGovern	R1b1c7	Ballinamore	Leitrim	~1791	Ballinamore	~1791	Oughteragh	Carrigallen	Leitrim
TFMcG	N8216	Thomas Francis McGovern	R1b1c7								
EOMcG	34985	Edward Owen McGovern	R1b1c7	Tullyveela	Cavan	≤1870	Tullyveela	≤1870	Templeport	Tullyhaw	Cavan
PJMcG1	39335	Phillip James McGovern	R1b1c7	Tullytrasna	Cavan	~1820	Tullytrasna	~1820	Corlough	Tullyhaw	Cavan
MJMcG	64486	Michael Joseph McGovern	R1b1c7	Tullyminster	Cavan		Tullyminster		Templeport	Tullyhaw	Cavan
CGMcG	25890	Clovis Gene McGovern	R1b1c7	Dallas	Texas	≤1850	unknown	~1823	unknown	unknown	Leitrim?
		McGovern Sm-A2x Unass.									
BMMcG	40445	Bernard Maurice McGovern	R1b1c7	Tecumseh	Ontario	1836					
JLMcG	35254	Joseph Ligouri McGovern	R1b1	various	Iowa	≤1880	unknown	≤1820	unknown	unknown	Mayo?
		McKiernan Line Tg-A2a									
FjMcK	43740	Francis Joseph MacKiernan	R1b1c7	Sradrinan	Leitrim		Sradrinan		Drumreilly	Carrigallen	Leitrim
KMMcK	64491	Kevin Michael McKiernan	R1b1c7	Paisley	Renfrewshire	≤1880	unknown	≤1880	unknown	unknown	unknown
W-D	84595	William Donohue	R1b1c7	Cook Co.	Illinois	1850s	unknown	~1800	unknown	unknown	Roscommon?
		Faughnan Line Fc-A2a									
MFF	25638	Michael Francis Faughnan Jr.	R1b1	Cattan	Leitrim	≤1813	Cattan?	~1790	Cloone?	Mohill?	Leitrim
V-F	14141	Victor Faughnan	R1b1								Leitrim
JPF	25839	Joseph Patrick Faughnan	R1b1	Cloonfannon	Leitrim	≤1850	Cloonfinnan	≤1850	Mohill	Mohill	Leitrim

Chart 6
MBS: Subgroup A2
Haplogroup R1b1 M222
O'Reilly – McGovern Cluster
Names & Origins

Below, in Charts 7 & 8, are the results and patterns for the members of this subgroup.

		F	H	Markers																																					
Breifne Clans Project		a	a	3	3	1	3	3	3	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	C	4	4		
Mixed Breifne Surnames		m	p	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	5	4	3	4	4	6	6	6	6	6	A	C	C	5	0	7	7	D	D	4	3	
Subgroup A2 Part 1		l	l	3	0		1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8	
		l	o					a	b				i	ii		a	b							a	b	c	d		A												
		y	g		3																									I	I						a	b			
		r	r		9																									H	I	I									
Kit/ID	Code	o	o		4																								4	a	b										
		r	u		√																		√																		
	FTDNA	p	p	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	26	27	28	29	30	31	32	33	34	35	36	37	
<u>Modal Haplotypes</u>				L																																					
[not characterized]	S28MH	l	R1b1c10	13	24	14	10	11	14	12	12	13	13	29	17	9	10	11	11	25	15	19	30	15	15	16	17	11	11	19	23	16	15	19	17	36	38	12	12		
Colla Uais Dalriadic	CUDMH	n	R1b1c*	13	24	14	10	11	14	12	12	13	13	30	18	9	10	11	11	25	15	19	30	15	15	17	17	11	12	19	24	15	15	18	17	37	38	12	12		
Irish Type 3	IT III MH	e	R1b1c*	13	24	14	11	11	14	12	12	11	13	13	29	17	8	9	11	11	25	15	19	29	13	13	15	17	11	11	19	23	15	15	18	17	36	38	12	12	
South Irish	SIMH		R1b1c*	13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	37	38	13	12	
Super W Atlantic	SWAMH		R1b1c	13	24	14	11	11	14	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	36	38	12	12		
Irish TCD	IMH		R1b1c7	13	25	14	11			12	12	13	14	29								15							11											12	
Northwest Irish	NWIMH		R1b1c7	13	25	14	11	11	13	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12		
	Reilly	Rg-A2a																																							
43746	NAR	1	R1b1c7	13	25	14	10	11	13	12	12	13	14	28	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	16	16	15	17	35	38	12	12		
N8271	JFOR	2	R1b1c7	13	25	14	10	11	13	12	12	13	14	29	17	9	10	11	11	25	15	18	30	16	16	16	17	11	11	19	23	17	17	17	17	38	39	12	12		
64489	HJOR	3	R1b1c7	13	25	14	10	11	13	12	12	13	14	29	17	9	10	11	11	26	15	18	30	16	16	16	17	11	11	19	23	17	17	16	17	37	38	12	12		
64492	MJR	4	R1b1c7	13	25	14	10	11	13	12	12	13	14	29	18	9	10	11	11	25	15	18	30	16	16	16	17	11	11	19	23	17	17	18	17	37	38	12	12		
52528	JLR	5	R1b1c7	13	25	14	9	11	13	12	12	13	14	29	17	9	10	11	11	25	15	18	30	16	16	16	17	12	11	19	23	17	17	17	17	38	38	13	12		
	Reilly																																								
Line Modal	Rg-A2aMH		R1b1c7	13	25	14	10	11	13	12	12	13	14	29	17	9	10	11	11	25	15	18	30	16	16	16	17	11	11	19	23	17	17	17	17	-	38	12	12		
	McGovern	Sm-A2a																																							
37762	BDMcG	1	R1b1c7	13	26	14	10	11	13	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	16	16	18	17	37	39	12	12		
38409	SEMcG	2	R1b1	13	26	14	10	11	13	12	12	13	14	29	17	10	10	11	11	25	15	18	31	15	16	16	17	11	12	19	23	16	16	18	17	37	40	12	12		
30369	RAMcG	2	R1b1	13	26	14	10	11	13	12	12	13	14	29	17	10	10	11	11	25	15	18	29	15	16	16	17	11	12	19	23	16	16	19	17	37	40	12	12		
43968	PJMcG2	3	R1b1	13	26	14	10	11	13	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	16	12	19	23	16	16	19	17	37	41	12	12			
	McGovern																																								
Line Modal	Sm-A2aMH		R1b1c7	13	26	14	10	11	13	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	12	19	23	16	16	-	17	37	-	12	12		

Chart 7
MBS: Subgroup A2 Part 1
Haplogroup R1b1 M222
O'Reilly – McGovern Cluster
Results & Patterns

Kit/ID	Code	F	Haplogroup	Breifne Clans Project MBS: A2 R&S Part 2																																							
Modal Haplotypes																																											
Super W Atlantic	SWAMH	I	R1b1c	13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	37	38	12	12			
Irish TCD	IMH	I	R1b1c7	13	25	14	11			12	12	13	14	29							15							11											12				
Northwest Irish	NWIMH	y	R1b1c7	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12			
	McGovern	Sm-A2b																																									
22897	DSMCG	1	R1b1c7	13	25	14	10	12	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	12	19	22	16	16	18	17	38	41	12	12			
N8216	TFMCG	2	R1b1c7	13	25	14	10	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	10	19	22	16	16	17	17	38	40	12	12			
34985	EOMCG	3	R1b1c7	13	25	14	10	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	16	16	16	17	11	11	19	22	17	16	18	17	38	40	12	12			
39335	PJMcG1	4	R1b1c7	13	25	14	10	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	15	16	16	11	11	19	22	17	16	18	17	39	40	12	12			
64486	MJMcG	5	R1b1c7	13	25	14	10	11	13	12	12	11	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	22	17	16	19	17	38	40	12	12			
25890	CGMcG	6	R1b1c7	13	25	14	10	11	13	12	12	12	13	15	29	16	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	19	17	38	40	12	12			
	McGovern																																										
Line Modal	Sm-A2bMH		R1b1c7	13	25	14	10	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	22	17	16	18	17	38	40	12	12			
		Sm-A2x																																									
	McGovern	Unass.																																									
40445	BMMcG	1	R1b1c7	13	24	14	11	11	13	12	12	13	13	14	30	16	9	10	11	11	25	15	18	31	15	16	16	16	11	11	19	23	17	16	18	17	37	39	12	12			
35254	JLMcG	2	R1b1	13	25	14	11	11	13	12	12	12	13	14	29	18	9	10	11	11	25	15	18	30	14	16	16	17	11	11	19	23	17	16	17	17	38	38	12	12			
	McGovern																																										
Clan Modal	Sm-A2MH		R1b1c7	13	25	14	10	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	40	12	12			
	McKiernan	Tg-A2a																																									
43740	FJMcK	1	R1b1c7	13	25	14	10	11	11	12	12	12	13	14	30	18	9	10	11	11	25	15	18	29	15	16	16	17	11	11	19	23	17	15	18	17	37	39	12	12			
64491	KMMcK	2	R1b1c7	13	25	14	10	11	11	12	12	12	13	14	29	18	9	10	11	11	25	15	18	31	15	16	17	17	12	11	19	23	18	16	16	17	37	40	12	12			
84595	W-D	3	R1b1c7	13	25	14	10	11	11	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	17	17	11	11	19	23	17	16	19	17	36	40	12	12			
	Faughnan	Fc-A2a																																									
25638	MFF	1	R1b1	13	26	14	10	11	13	12	12	13	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	15	16	18	17	38	39	12	12			
14141	V-F	2	R1b1	13	26	14	10	11	13	12	12	13	13	14	29	17	9	10	11	11	25	15	18	30	14	16	16	17	11	11	19	23	15	16	18	17	38	39	12	12			
25839	JPF	3	R1b1	13	26	14	10	11	13	12	12	13	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	15	16	17	17	38	38	12	12			
	Faughnan																																										

Chart 8
MBS: Subgroup A2 Part 2
Haplogroup R1b1 M222
O'Reilly – McGovern Cluster
Results & Patterns

This subgroup is a collection of R1b M222 participants of various surnames who share a non-R1b M222 and non-SWAMH value of ten for Marker 391 that is consistent across all the O'Reillys, the McGoverns, the Faughnans and the McKienans, with three exceptions out of 22 participants. The exceptions are two McGoverns and a Reilly. The O'Reillys, the McGoverns and the Faughnans are each represented by three or more participants. A Donohue who shows this value has been repeated here with the two McKiernans to point out the resemblance in profiles. The portion of the Marker 391 column showing the value of ten for these participants is colored yellow.

The additional data here augments what was noted in the previous report, that the overall aspect of their profiles suggests that these O'Reillys, McGoverns, Faughnans and McKiernans descend from a common male-line ancestor who belonged to Haplogroup R1b M222, had a value of ten for Marker 391, lived in the few centuries before the earliest of the eponymous ancestors of these clans, and was not the ancestor of the Donohoes, McTiernans, Clancys, O'Conors or other surnames represented in this section. A characteristic deviant value for only a single marker is a somewhat weak basis on which to construct a subgroup, though, so as further data becomes available the arrangement here is likely to be modified.

Chart 9 below shows the links among the participants in this subgroup, who each fall into one of four surname lines or into the grouping of the two unassigned McGoverns. The O'Reilly line and the two principal McGovern lines each show weak links with all of the other lines. The Faughnan line shows moderate as well as weak links with the McGovern Sm-A2a line and no links with the McKiernan line, and the two unassigned McGoverns show no links with the Faughnan line or with the McGovern Sm-A2a line.

Among the surnames here, the most definite link would seem to be between the McGovern Line Sm-A2a and the Faughnans.

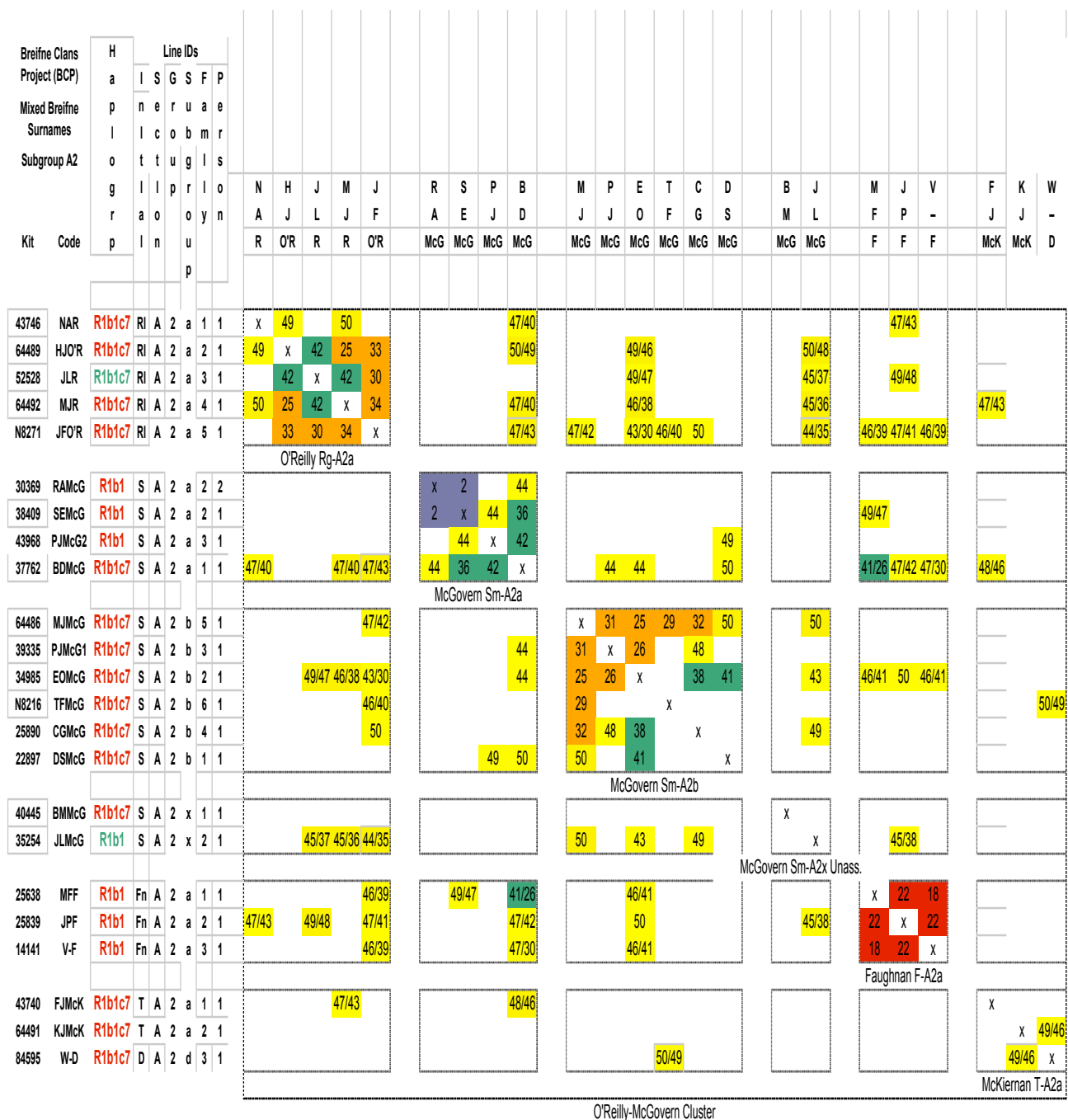


Chart 9
MBS : Subroup A2
Haplogroup R1b1 M222
O'Reilly-McGovern Cluster
Generations to MRCA at 99% Probability

Subgroup AX: Various Lineages

Chart 10 below shows the names and origins for the members of this subgrouping. Only about a quarter of these lineages can be traced back to Breifne.

Code	Kit	Breifne Clans Project	H	Family Residential ID			Family Origins in Ireland				
		Subgroup AX	g	Address	State/Prov.	From	Townland	Year	Civil Parish	Barony	County
		Various Lineages	r		/County						
		Mixed Breifne Surnames	p								
		Haplogroup R1b1 M222									
		O'Connor Line Cn-AXa									
KDO'C	64493	Kieran Denis O'Connor	R1b1c7		Roscommon		Croghan	≤971	Killukin	Boyle	Connacht
RTO'C	65969	Roland Thomas O'Connor	R1b1				unknown	~1800	unknown	unknown	unknown
		Clancy Line FI-AXa									
WGC	103604	William George Clancey	R1b1	Chepstow	Ontario	~1855	Sligo	≤1811	unknown	Carbury	Sligo
PAC	104283	Paul Augustine Clancy	R1b1	Ballygrania	Sligo	≤1833	~Drumahaire	~1775	unknown	Drumahaire	Leitrim
WJC	104281	William Joseph Clancy	R1b1	Glenade	Leitrim	≤1775	Glenade	≤1775	Rossinver	Rosclogher	Leitrim
		Cullivan Line CI-AXa									
JPC	65836	Joseph Patrick Cullivan	R1b1c7	Pottawatomie	Kansas	≤1880	Cavan	≤1842	Urney	Loughtee Upr	Cavan
T-C	89281	Terry Cullivan	R1b1c								
		McGoldrick Line UI-AXa									
F-McG	43750	Francis McGoldrick	R1b1c7	Collooney?	Sligo	~1820	Collooney?	~1820	(Ballysadare)	(Tirerrill)	Sligo
TJG III	N18546	Thomas Joseph Golden III	R1b1	Hawley	Pennsylvania		unknown	~1835	unknown	unknown	unknown
JJG	35946	James Joseph Golden	R1b1c7	Rathlacken	Mayo	~1820	Rathlacken	~1820	Kilcummin	Tirawley	Mayo
		Misc. AX Lines									
A-B	6292	A. B.	R1b1				Swindon	≤1945	unknown	unknown	Wiltshire
JJC	75557	James Joseph Coogan	R1b1c7	Kingston	New York	1847	unknown	~1800	unknown	Cremorne	Monaghan
REC	N32460	Robert Edward Coyne	R1b1c7	Toberclare	Meath	≤1830	unknown	~1790	unknown	unknown	unknown
JTC	N3035	James Timothy Curry	R1b1	Manchester	Lancashire	≤1833	Warwick	≤1813	unknown	Kington	Warwickshire
JLM	34129	John Lawrence Manross	R1b1c7	Falmouth	Maine	≤1690	unknown	≤1690	unknown	unknown	unknown
M-S	32550	M. Smith	R1b1c7	unknown	Cavan	≤1820	unknown	≤1820	unknown	unknown	Cavan
KJH	94897	Kenneth James Hill	R1b1c7	unknown	Antrim	~1720	unknown	~1720	unknown	unknown	Antrim

Chart 10
MBS: Subgroup AX
Haplogroup R1b1 M222
Various Lineages
Names & Origins

The results and profiles of the members of this subgrouping can be seen in Charts 11 & 12 below.

		F	H	Markers																																				
		a	a	3	3	1	3	3	3	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	C	4	4	
Breifne Clans Project		m	p	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	4	3	4	4	6	6	6	6	6	A	C	C	5	0	7	7	D	D	4	3	
Mixed Breifne Surnames		l	l	3	0		1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8
Subgroup AX: Part 1		l	o			or		a	b				i		ii		a	b										A												
Various Lineages		y	g			3																							I	I							a	b		
Kit/ID	Code	o	o			4																						H	I	I										
		r	u			√																	√							a	b									
FTDNA			p	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	26	27	28	29	30	31	32	33	34	35	36	37
Modal Haplotypes		L																																						
[not characterized]	S28MH	I	R1b1c10	13	24	14	10	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	30	15	15	16	17	11	11	19	23	16	15	19	17	36	38	12	12
Colla Uais Dalriadic	CUDMH	n	R1b1c*	13	24	14	10	11	14	12	12	12	13	13	30	18	9	10	11	11	25	15	19	30	15	15	17	17	11	12	19	24	15	15	18	17	37	38	12	12
Irish Type 3	IT III MH	e	R1b1c*	13	24	14	11	11	14	12	12	11	13	13	29	17	8	9	11	11	25	15	19	29	13	13	15	17	11	11	19	23	15	15	18	17	36	38	12	12
South Irish	SIMH		R1b1c*	13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	37	38	13	12
Super W Atlantic	SWAMH		R1b1c	13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	36	38	12	12
Irish TCD	IMH		R1b1c7	13	25	14	11			12	12	13	14	29							15						11												12	
Northwest Irish	NWIMH		R1b1c7	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12
O'Conor		Cn-AXa																																						
64493	KDO'C	1	R1b1c7	12	25	14	11	11	13	12	12	12	13	14	29	16	9	11	11	11	25	14	18	30	15	16	16	17	11	11	19	23	17	16	19	17	38	39	12	12
65969	RTO'C	2	R1b1	13	25	14	11	11	13	12	12	12	13	14	29	16	9	11	11	11	25	15	18	30	15	16	16	17	11	11	17	23	17	15	19	17	38	39	12	12
B.		AB-AXa																																						
6292	A-B		R1b1	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	16	11	11	19	23	17	17	20	17	38	40	12	12
Clancy		FI-AXa																																						
103604	WGC	1	R1b1	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	17	17	39	40	12	12
104283	PAC	2	R1b1	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	17	17	11	11	19	23	17	16	18	17	39	40	12	12
104281	WJC	3	R1b1	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	18	17	39	39	12	12
Clancy																																								
Line Modal	FI-AxaMH		R1b1c7	13	35	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	18	17	39	40	12	12

Chart 11
MBS: Subgroup AX Part 1
Haplogroup R1b1 M222
***Various Lineages
Results & Patterns***

The subgrouping here is a collection of R1b M222 lineages which have not yet been assigned to a subgroup.

Chart 13 below shows the links found among these participants.

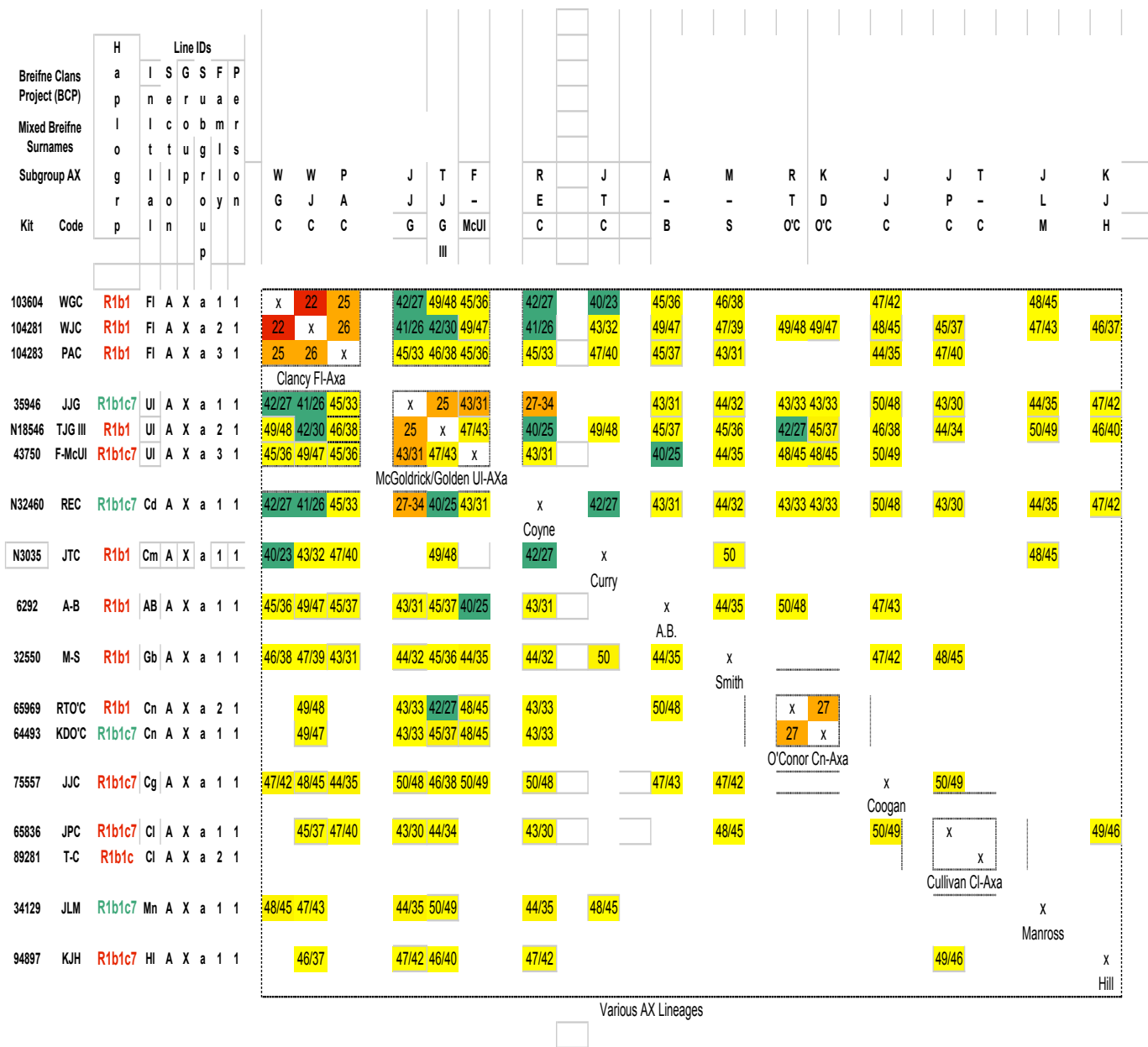


Chart 13
MBS : Subgroup AX
Haplogroup R1b1 M222
Various Lineages
Generations to MRCA at 99% Probability

Among these surnames there is none sufficiently numerous to form a “core.” A subgroup does appear to be developing, however, in the upper left quadrant with the Clancy-Golden-Coyne-Curry surnames. The Coyne participant is only a Genetic Distance = 1 away from the NWIMH at the 37-marker level, and the same is true for one of the Golden's, so it may be difficult to develop a distinctive subgroup profile here.

Group A: 67-Marker Level

Upgrading to the 67-marker level has been completed by 21 of the participants, representing 16 independent lineages. Their results for the additional 30 markers are given in Charts 14 & 15 below.

Kit/ID	Code	F a m i l	Hgrp	Breifne Clans Project MBS: Markers 38-67 Part 2																													
<u>Modal Haplotypes</u>																																	
Super W Atlantic	SWAMH	I	R1b1c	11	9	15	16	8	10	10	8	10	10	12	23	23	16	10	12	12	15	8	12	22	20	13	12	11	13	11	11	12	12
Northwest Irish	NWIMH	y	R1b1c7	11	9	15	16	8	10	10	8	10	10	12	21	23	16	10	12	12	16	8	12	25	20	13	12	11	13	11	11	12	12
	McTiernan	Tg-A1a																															
21151	LVMcT	1	R1b1c7	11	9	15	16	8	10	10	8	10	10	12	21	23	16	10	12	12	16	8	12	25	20	13	12	11	13	11	11	12	12
	McGovern	Sm-A2a																															
38409	SEMcG	2	R1b1	11	9	15	16	8	10	10	8	10	10	12	22	23	16	10	12	12	17	8	12	25	20	13	12	11	13	11	11	12	12
30369	RAMcG	2	R1b1	11	9	15	16	8	10	10	8	10	10	12	22	23	16	10	12	12	17	8	12	25	20	13	12	11	13	11	11	12	12
	O'Conor	Cn-AXa																															
64493	KDO'C	1	R1b1c7	11	9	15	16	8	10	10	8	10	10	12	21	23	16	10	12	12	16	8	13	25	20	13	12	11	13	11	11	12	12
65969	RTO'C	2	R1b1	11	9	15	16	8	10	10	8	10	10	12	21	23	16	10	12	12	17	8	13	25	20	13	12	11	13	11	11	12	12
	Coyne	Cd-AXa																															
N32460	REC		R1b1c7	11	9	15	16	8	10	10	8	10	10	12	21	23	16	10	12	12	16	8	12	25	20	13	12	11	13	11	11	12	12
	Cullivan	Cl-AXa																															
65836	JPC	1	R1b1c7	11	9	15	16	8	10	10	8	10	10	12	21	23	16	10	12	12	16	8	12	25	20	13	12	11	13	11	11	12	12
	Curry	Cm-AXa																															
N3035	JTC		R1b1	11	9	15	16	8	10	10	8	10	10	12	21	23	16	10	12	12	16	8	12	25	20	13	12	11	13	11	11	12	12
	Golden	Ul-AXa																															
35946	JJG	3	R1b1c7	11	9	15	16	8	10	10	8	10	10	12	21	23	16	10	12	12	16	8	12	25	20	14	12	11	13	11	11	12	12

Chart 15
MBS: Group A Part 2
Haplogroup R1b1 M222
67-Marker Level Participants
Results & Patterns

The results for these participants at this level appear to conform fairly well to the NWIMH. There is not enough data yet to determine whether there might be any distinctive deviations from the NWIMH among the lineages represented.

Group A: General Points

Only seven of the 51 lineages in this section have less (6xsix and 1xfive) than seven of the first nine characteristic R1b M222MH values when compared with the marker values for the SWAMH, as can be seen by the lavender/light purple columns in the “results” charts. Three of these lineages with six and the lineage with five are estimated or have been tested by FTDNA to be R1b M222. All of these seven lineages represent Breifne surnames. Of the remaining lineages, 15 have 9/9, 18 have 8/9 and 11 have 7/9 of the first nine characteristic R1b M222MH values. The percentages of the 51 lineages showing each of the first nine characteristic modal marker values are as follows: 1st: 86%; 2nd: 94%; 3rd: 94%; 4th: 100%; 5th: 80%; 6th: 94%; 7th: 86%; 8th: 68%; and 9th: 82%. So, of the first nine, only the eighth characteristic modal marker value is shown by less (68%) than 80% of the lineages represented here.

The picture is more mixed for the tenth and eleventh markers where the modal marker values for R1b M222 differ from the SWAMH values. Eleven of the lineages show the characteristic R1b M222MH values at both of these markers, 22 show the characteristic value at only one marker and 16 show the characteristic values at neither marker. The Marker CDYa modal value for R1b M222 is 38, and that is also the modal value for this group, but not by much. Only 47% of the participants in this group show that value at this marker, while 39% show the SWAMH values of 36 or 37 and 14% show other values. Marker CDYb is similarly uncertain. 47% again show the characteristic R1b M222MH value of 39 at this marker, while only 18% show the SWAMH value of 38, 29% show a value of 40 and 6% show some other value. Because of the uncertainty in predictive usefulness, the empty spaces between values in these columns have been left with no color.

The 17 participants, representing 15 independent lineages, who have received the full results for the ‘Deep Clade’ test all belong to Haplogroup R1b M222. 28 others, representing a further 26 lineages, have been “estimated” by FTDNA to belong to this haplogroup. It can be predicted from their profiles that participants who match at least seven of the first nine characteristic R1b M222MH values belong to this haplogroup. This would bring another seven of the lineages into the haplogroup, for a total of 48 of the 51 lineages represented in this section.

There is one surprise representation in this group, and that is the presence of the Clancys. Unlike the other clans here, who have names associated with the Ui Briuin or the related Ui Fiachrach, the Clancys by tradition are the principal clan of the not-so-numerous Dartraige, descendants of Ith,³⁴ and so of a completely different ancestry. They would be expected to be totally unrelated within the scope of this project to the other clans in this group. There is a mystery to be unraveled here.

Not shown in the results charts above is a network of weak (and a few moderate) links connecting all three of the subgroups. Almost all of the participants in any one of the subgroups have links to participants in the other two groups. Subgroup AX occupies perhaps a more central position, with a somewhat greater density of links to the other two groups than they have to each other. As this web is generated by estimates based on a 99% probability of a common male-line ancestor within 50 generations for the pairs being compared, there is a suggestion that the common male-line ancestor for everyone in Group A (i.e., all the participants in the BCP who belong to Haplogroup R1b M222) existed not too long before about 50 generations ago. 50 generations would probably take us back to sometime in the sixth century. This would indicate that the M222 mutation is a relatively youthful SNP having arisen about that time, or that a man of about that time, or a few closely related men not much later, who carried the mutation moved into the Breifne region.

According to the traditional accounts, the bulk of the surnames represented in this group correspond with the names of clans descended from King Brion of Connacht, half-brother of High King Niall of the Nine Hostages. Brion and Niall were both sons of High King Eochu Mugmedon, who himself was of the royal lineage of the Connachta, descendants of Conn of the Hundred Battles. The McEvoy thesis project¹⁹ and the survey done by Wilson²⁰ have shown that many Ui Neill clans, traditionally descended from the above Niall, also belong to Haplogroup R1b M222. High King Eochu Mugmedon is said to have reigned from 358 to 365³⁵, so the data so far gathered could be accounted for if he carried the M222 mutation and that mutation originated in his immediate paternal ancestors. If a number of clans traditionally descending from other lineages are found who also belong to Haplogroup R1b M222, such as perhaps the Clancys, then that would suggest that the mutation is significantly older.

'Irish R1b Other' Section

Overview

This section, unlike the Irish R1b M222 Section, encompasses multiple groups which show no links at all with each other or with the R1b M222 group as far as 50 generations ago at the 99% confidence level.

The disparities in results profiles indicate that multiple distinct subclades of R1b1c, yet to be defined, are probably represented by the groups here.

Group B: Breifne Groups

None of the seven members of Group B who have had the 'Deep Clade' test have had their specific subclade identified. They all belong to R1b1c, but not to any of its subclades that have been tested for, including R1b M222. A further 45 members have been "estimated" to belong to R1b1c. As FTDNA tests for subclades one through eight, this means that these members of Group B are R1b1c but do not belong to Haplogroups R1b1c1 through R1b1c8. Additional tests are now becoming available through FTDNA which would allow testing for the SNPs defining Haplogroups R1b1c9 & 10.

Subgroup B1: Pure Donohoe Cluster

Subgroup B1: Pure Donohoe Cluster (PDC) is a cluster of 18 individuals all having variants of the surname Donohoe (Donohoe, Donahue, Donohue and O'Donoghue), representing 16 lineages most of which show a close degree of connection. They all belong to haplogroup R1b1 by test or FTDNA estimation, and they probably all belong to the same subclade. Two of these participants have been tested only for M269, the mutation defining R1b1c, and were positive (they are indicated as **R1b1c** with no asterix). Those three who have had the Deep Clade test all belong to an unidentified subclade or subclades of R1b1c, not R1b1c1 through R1b1c8 (they are indicated as **R1b1c***). It's not yet clear whether the newly available FTDNA tests for the SNPs defining Haplogroups R1b1c9 & R1b1c10 will be useful for any of these participants. Chart 16 below shows the names and origins of the members of this group.

Chart 17, immediately following Chart 16, shows the distinctive profile pattern of this cluster.

Breifne Clans Project			H	Family Residential ID			Family Origins in Ireland				
Subgroup B1			g	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County
Code	Kit	Pure Donohoe Cluster	r								
		p									
		Donohoe Line Dn-B1a									
MJD	14012	Michael Joseph Donohoe	R1b1c*	Crosserlough	Cavan	~1776	Crosserlough	~1776	Crosserlough	Castlerahan	Cavan
JFD	56053	James Francis Donahue III	R1b1c*	Dallas	Texas	1956	Unknown	~1850	Unknown	Unknown	Unknown
PJD1	28514	Paul James Donohue	R1b1c	Dromard	Longford	~1840	Drumard	~1840	Killoe	Longford	Longford
JHD	14009	James Hugh Donohoe	R1b1c	Derrycassan	Cavan	1777	Derrycassan	1777	Templeport	Tullyhaw	Cavan
JPD1	43736	John Paul ("Sean") Donohoe	R1b1c	Creevy	Longford	~1815	Creevy	~1815	Abbeylara	Granard	Longford
BTD	14007	Brian Thomas Donohoe	R1b1c	Creevy	Longford	~1815	Creevy	~1815	Abbeylara	Granard	Longford
LCD	19051	Leonard Charles Donohoe	R1b1c	Des Moines	Iowa	≤1859	Unknown	~1808	Unknown	Unknown	Unknown
PJD3	34624	Patrick Joseph Donohoe III	R1b1c*	Monnery	Cavan	~1810	Monnery	~1810	Kilmore	Loughtee Upper	Cavan
JBD	43745	John Brendan Donohoe	R1b1c	Kinkeel	Cavan	~1830	Kinkeel	~1830	Killeshandra	Tullyhunco	Cavan
BGD	43747	Brian Gerard Donohoe	R1b1c	Gortermone	Leitrim	?	Gortermone	?	Carrigallen	Carrigallen	Leitrim
MRD	43748	Michael Robert Donohoe	R1b1c	Cappagh	Cavan	~1780	Cappagh	~1780	Killeshandra	Tullyhunco	Cavan
DPD	73523	Damien Peter Donohoe	R1b1c		Cavan						Cavan
EVD	82458	Eugene Valentine Donohoe	R1b1c	Cappagh	Cavan	~1780	Cappagh	~1780	Killeshandra	Tullyhunco	Cavan
		Donohoe Line Dn-B1b									
RJD	23491	Raymond Joseph Donohue	R1b1	Drummallaght	Cavan	~1837	Drummallaght	~1837	Killinkere	Castlerahan	Cavan
CJAOD	43737	Charles James Alphonsus O'Donoghue	R1b1	Cavan Town	Cavan	~1845	Cavan Town	~1845	Annagelliff	Loughtee Upper	Cavan
SFD	43738	Sean Francis Donohoe	R1b1c	Drumhillagh	Cavan	~1870	Drumhillagh	~1870	Lavey	Loughtee Upper	Cavan
		Donohoe Line Dn-B1c									
JLO'D	26177	John LiPomi O'Donoghue	R1b1c	Lowell	Massachusetts	1846	Unknown	≤1820	Unknown	Unknown	Cavan
ECD	26540	Elmer Charles ("Ed") Donohue	R1b1c	Cootehill	Cavan	≤1841	Cootehill	≤1841	Drumgoon	Tullygarvey	Cavan

Chart 16
Breifne Groups: Subgroup B1
Pure Donohoe Cluster
Names & Origins

The results of applying the FTDNATiP calculator are shown for the 99% probability level in Chart 18 below.

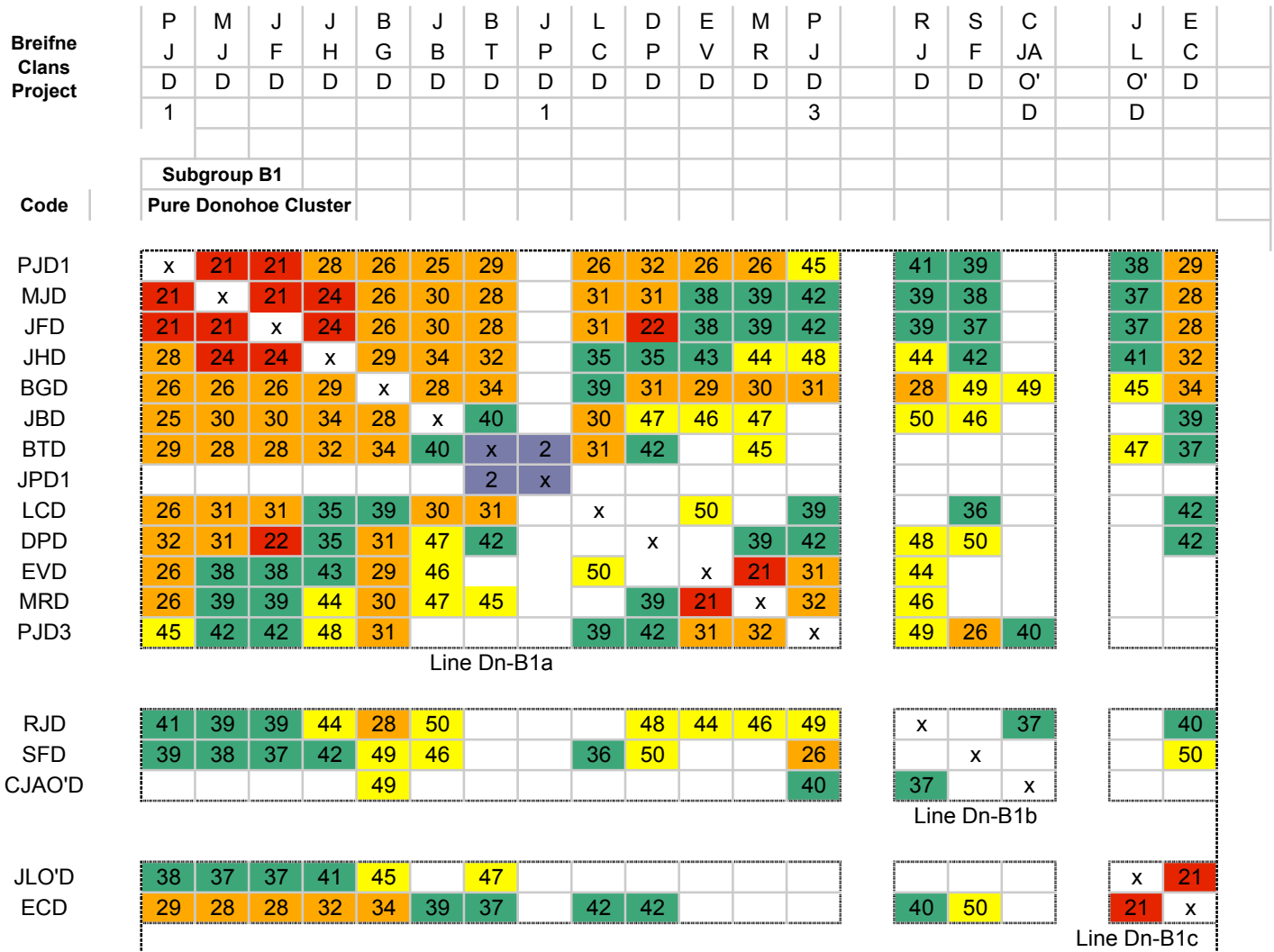


Chart 18
Breifne Groups: Subgroup B1
Pure Donohoe Cluster
Generations to MRCA at 99% Probability

In Chart 18 the overall impression is of stronger links than those seen in the corresponding charts in the MBS section, with a stronger diagonal core area and fewer gaps where there are no links. There is a somewhat of a relative fading out, however, from the core area at the top left to the core area at the bottom right. This could be due just to the heavier sampling of Line Dn-B1a. All the

lines are a bit anomalous. Line Dn-B1a, at the top left, seems to have more than one core. Perhaps it will eventually be able to resolve this line into two or more lines. In Line B1b, in the middle, there is no very strong link, suggesting that there is no pair here with a relatively recent common male-line ancestor. Line Dn-B1c, at the bottom right, has a pair with very strong links, but one of this pair, and not the other, also has strong links with several of the members of Line Dn-B1a.

Overall there is an impression of a more recent group, with many strong internal links and an absence of widespread weak links. The broader connections of this cluster remain unknown.

There is one McTiernan whose only link to anyone in the BCP is a single marginal very weak link to one Donohoe in this subgroup, but his profile pattern is quite different from the patterns here. His link appears to be due to random chance and he is not included here.

The general profile pattern here does not match any of those so far described, as shown by the modal haplotypes given at the top of Chart 17. There are characteristically deviant values at seven of the first 37 markers. At Markers 19, 439, 389 I1, 448, 576, CDY b and 442, the values for the modal of this subgroup are 15, 13, 12 (with 29 for 389 I2) 18, 19, 39 and 11 respectively, versus the SWAMH values of 14, 12, 13 (again with 29 for 389 I2, yielding a Genetic Distance = 2), 19, 18, 38 and 12 for the same markers. With this degree of difference from the SWAMH there is a possibility that this subgroup may represent a distinct haplogroup whose defining SNP has yet to be discovered.

Subgroup B2: Pure McTiernan Cluster

Subgroup B2: Pure McTiernan Cluster (PTC) is a cluster of 20 individuals all having variants of the surname McTiernan (McTiernan, McTernan, McTurnan, Tiernan and Kiernan), representing 20 lineages. 17 tested only to the 25-marker level. Only three have so far tested to the 37-marker level and only one has had the Deep Clade test done. Chart 19 shows the names and origins of the members of this group.

From the profile patterns in Chart 20, immediately following Chart 19, it can be seen that all but two of the members of this cluster fall into Lines Tg-B1a and Tg-B1b. The two lines differ markedly from one another at several markers, having different modal values at six of the first 25 markers, and so probably do not have the same eponymous ancestor. The remaining two members of this subgroup make up the third line, Line Tg-B1c. The modal haplotype profiles of the first two lines, as well as being quite different from each other, are also different from the pair of profiles making up the third line, so there is possibly

more than one subclade represented here.

			Breifne Clans Project	H	Family Residential ID			Family Origins in Ireland				
			Subgroup B2	g	Address	State/Prov.	From	Townland	Year	Civil Parish	Barony	County
Code	McT Code	Kit	Pure McTiernan Cluster	r		/County						
				p								
			McTiernan Line Tg-B2a									
C-McT2	Tc	31886	Chris McTurnan	R1b1	Not Given	Not Given		Unknown	>1800	Unknown	Unknown	Unknown
T-McT	T (+1)	640	Tom McTernan	R1b1c	Curry	Leitrim	≤1804	Curry	≤1804	Killarga	Drumahaire	Leitrim
M-McT1	T	673	Mark McTernan	R1b1c	Leonagh1	Leitrim	~1790	Leonagh1	~1790	Killarga	Drumahaire	Leitrim
R-McT	T	1029	Rory MacTiernan	R1b1c	Mountallen	Roscommon	≤1760	Mountallen	≤1760	Kilronan	Boyle	Roscommon
M-McT2	T	3436	Michael McTiernan	R1b1c	Not Given	Not Given		Unknown	≤1844	Unknown	Unknown	Unknown
M-McT3	T	3713	Martin McTiernan	R1b1c	Leonagh2	Leitrim	≤1830	Leonagh2	≤1830	Killarga	Drumahaire	Leitrim
G-McT3	T (+1)	9498	Gene McTiernan	R1b1c	Not Given	Not Given		Unknown	≤1817	Unknown	Unknown	Leitrim
TMMcT	T	17363	Thomas Michael McTernan	R1b1c	Killinagh	Cavan	≤1838	Killinagh	≤1838	Templeport	Tullyhaw	Cavan
D-McT	T (+2)	5450	Douglas McTiernan	R1b1c	Not Given	Not Given		Unknown	≤1826	Unknown	Unknown	Unknown
J-McT2	T (+1)	646	Jim McTiernan	R1b1c	Derryvalanagher	Leitrim	~1800	Derryvalanagher	~1800	Inishmagrath	Drumahaire	Leitrim
J-McT1	Tb	635	John McTernan	R1b1c	Fenagh	Leitrim	≤1865	Fenagh	≤1865	Killasnet	Rossclogher	Leitrim
MPMcT	T (+1)	674	Michael Patrick McTiernan	R1b1c	Sheskin	Leitrim	≤1708	Sheskin	≤1708	Killarga	Drumahaire	Leitrim
S-McT1	Ta	639	Scott McTiernan	R1b1c	Derrinvoher	Leitrim	≤1782	Derrinvoher	≤1782	Inishmagrath	Drumahaire	Leitrim
			McTiernan Line Tg-B2c									
A-McT	T2 (+1)	19343	Adam McTiernan	R1b1c	Drumahaire	Leitrim	~1875	Drumahaire	~1875	Drumlease	Drumahaire	Leitrim
B-McT	T2	2145	Bernard McTernan Jr.	R1b1c	Not Given	Not Given		Unknown	~1850	Unknown	Unknown	Unknown
G-McT1	T2	3435	Geoffrey McTernan	R1b1c	Not Given	Sligo	≤1834	Unknown	≤1834	Unknown	Unknown	Sligo
PEMcT	T2 (+2)	73917	Paul Edwin McTiernan	R1b1c	Not Given	Not Given		Unknown		Unknown	Unknown	Unknown
M-McT4	T2 (+2)	5449	Michael McTiernan	R1b1c	Corglancy	Leitrim	~1795	Corglancy	~1795	Kilannumery	Drumahaire	Leitrim
			McTiernan Line Tg-B2b									
DJT		52762	David John Tiernan	R1b1c*	Naul	Dublin		Unknown		Unknown	Unknown	Cavan?
A-K		43751	Andrew nm Kiernan	R1b1c	Aughavains	Cavan	≤1776	Aughavains	≤1776	Scrabby	Tullyhunco	Cavan

Chart 19
Breifne Groups: Subgroup B2
Pure McTiernan Cluster
Names & Origins

The FTDNATiP calculator was not applied to this cluster as only three members tested at the 37-marker level, and they did not all belong to the same line. For the same reason modal haplotypes were constructed for the first two lines for only the first 25 markers.

One of the members (674) of McTiernan Line Tg-B2a who did test at the 37-marker level showed minimal links with a single member (14009) of Donohoe Line Dn-B1a, as referred to in Subgroup B1 above. However, this McTiernan matches the McTiernan Line Tg-B2a profile pattern quite well, the Donohoe matches the Donohoe Line Dn-B1a quite well and the two profile patterns do not at all match each other. This would seem to be a link resulting from convergent mutation, with the McTiernan and the Donohoe diverging from their respective clusters by chance to resemble each other slightly more closely, rather than a link due to relatively recent common male-line ancestry.

Subgroup B3: O'Rourke Subgroup

The O'Rourke Subgroup (O'RS) is made up of a dozen participants of five different surnames. There are now six O'Rourkes versus four in the last report. The pair of McTiernans are repeats from the Pure McTiernan Group above, and are placed there in Line Tg-B2a. The names and origins of all of these 12 are shown in Chart 21 below.

		Breifne Clans Project		H	Family Residential ID			Family Origins in Ireland				
		Subgroup B3		g	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County
Code	Kit	O'Rourke Subgroup		r								
				p								
		O'Rourke Line R-B3a										
PJO'R	N36071	Peter Joseph O'Rourke	R1b1	Oswego	New York	≤1854	Unknown	≤1813	Unknown	Unknown	Unknown	Leitrim
WRR	67651	William Roger Roark	R1b1c	xxx	Virginia?	~1740	Unknown		Unknown	Unknown	Unknown	Unknown
MDO'R	N30440	Michael D. O'Rourke	R1b1c*	St. Louis	Missouri	?	Unknown	<1810	Unknown	Unknown	Unknown	Unknown
RTR	68210	Robert Terry Rork	R1b1c*	Howard Co.	Nebraska	1879	Unknown	~1824	Unknown	Unknown	Unknown	Unknown
JFO'R	73522	James Francis O'Rourke	R1b1c	Drumhallagh	Cavan	≤1876	Drumhallagh	≤1876	Larah	Tullygarvey		Cavan
M-O'R	90084	Michael O'Rourke	R1b1									
		McTiernan Line T-B2a										
J-McT1	635	John McTernan	R1b1c	Fenagh	Leitrim	≤1865	Fenagh	≤1865	Killasnet	Rosclogher		Leitrim
MPMcT	674	Michael Patrick McTiernan	R1b1c	Sheskin	Leitrim	≤1708	Sheskin	≤1708	Killarga	Drumahaire		Leitrim
		Smith Line Gb-B3a										
KES	63408	Kenneth Edward Smith	R1b1c	White Plains	Alabama	≤185-	Unknown		Unknown	Unknown	Unknown	Unknown
		Reynolds Line Rn-B3a										
JJR	39183	John Joseph Reynolds	R1b1c	Drumboy	Leitrim	~1790	Drumboy	~1790	Mohill		Mohill	Leitrim
SHPR	N2316	Steven Huntley Patrick Reynolds	R1b1c	Montreal	Quebec	1870	Unknown	1802-12	Unknown		Unknown	Sligo (or Leitrim)
		Boylan Line Bg-B3a										
C-B	78819	Ciaran O'Baoigheallain	R1b1c*	Clerran	Monaghan	≤1816	Clerran	≤1816	Clontibret		Cremorne	Monaghan

			F	H	Marker Code																																					
Database	Kit/ID	Code	a	a	3	3	1	3	3	3	4	3	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	C	4	4		
			m	p	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	5	4	3	4	4	6	6	6	6	6	A	C	C	5	0	7	7	D	D	4	3	
			l	l	3	0	1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8	
			l	o				or	a	b				i		ii		a	b											A												
			y	g				3																							I	I							a	b		
			r	r				9																							H	I	I									
			o	o				4																							4	a	b									
			r	u				√																		√																
			FTDNA	p		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	26	27	28	29	30	31	32	33	34	35	36	37
			Modal Haplotypes	L																																						
[not characterized]	S28MH	l	R1b1c10	13	24	14	10	11	14	12	12	13	13	29	17	9	10	11	11	25	15	19	30	15	15	16	17	11	11	19	23	16	15	19	17	36	38	12	12			
Colla Uais Dalriadic	CUDMH	n	R1b1c*	13	24	14	10	11	14	12	12	13	13	30	18	9	10	11	11	25	15	19	30	15	15	17	17	11	12	19	24	15	15	18	17	37	38	12	12			
Irish Type 3	IT III MH	e	R1b1c*	13	24	14	11	11	14	12	12	11	13	13	29	17	8	9	11	11	25	15	19	29	13	13	15	17	11	11	19	23	15	15	18	17	36	38	12	12		
South Irish	SIMH		R1b1c*	13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	37	38	13	12		
Northwest Irish	NWMH		R1b1c7	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12		
Super W Atlantic	SWAMH		R1b1c	13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	37	38	12	12		
O'Rourke Rd-B3a																																										
Breifne CP	67651	WRR	2	R1b1c	13	24	14	11	11	14	12	12	13	13	30	18	9	9	11	11	25	15	19	27	15	15	16	17	10	11	19	23	16	15	18	17	36	37	12	12		
Breifne CP	90084	M-O'R	6	R1b1	13	25	15	10	11	14	12	12	11	13	14	30	17	9	10	11	11	25	15	19	30	15	15	16	17	10	11	19	23	17	14	19	18	36	37	12	12	
Breifne CP	N36071	PJO'R	1	R1b1	13	25	14	11	11	14	12	12	12	13	13	30	17	9	9	11	11	25	15	19	29	15	15	17	17	10	10	19	23	15	15	19	17	39	39	12	12	
Roark SP	67652	Roark		R1b1	13	24	14	11	11	14	12	12	13	13	30	19	9	9	11	11	25	15	19	27	15	15	16	17	10	11	19	23	16	15	18	17	36	37	12	12		
Roark SP	67653	Roark		R1b1	13	24	14	11	11	14	12	12	13	14	13	31	18	9	9	11	11	25	15	19	27	15	15	16	17	10	11	19	23	16	15	18	17	36	37	12	12	
Line Modal	R-B3aMH	√	R1b1c		13	24	14	11	11	14	12	12	13	13	30	-	9	9	11	11	25	15	19	27	15	15	16	17	10	11	19	23	16	15	18	17	36	37	12	12		
McTiernan Tg-B2a																																										
Breifne CP	674	MPMcT	1	R1b1c	13	24	14	11	11	14	12	12	13	13	30	17	9	9	11	11	25	15	19	29	15	15	17	17	10	11	19	23	16	15	19	16	37	40	12	12		
Breifne CP	635	J-McT1	2	R1b1c	13	24	14	11	11	14	12	12	12	13	13	30	18	9	9	11	11	25	15	19	27	15	15	16	17	10	11	19	23	17	15	18	17	36	37	12	12	
O'Rourke Rd-B3b																																										
Breifne CP	N30440	MDO'R	3	R1b1c*	13	24	15	11	11	14	12	12	13	14	13	30	19	9	10	11	11	25	16	19	30	15	15	18	18	11	9	19	23	17	15	17	17	38	38	12	11	
Breifne CP	68210	RTR	4	R1b1c*	13	24	14	11	11	14	12	12	13	13	13	29	17	9	10	11	11	25	15	19	30	14	14	14	17	11	11	19	23	17	15	18	17	39	40	13	12	
Breifne CP	73522	JFO'R	5	R1b1c	13	24	14	11	11	14	12	12	13	13	13	29	18	9	9	11	11	25	15	19	30	17	17	17	17	11	11	19	23	15	15	18	18	38	38	13	12	
Roark SP	N42482	Roark		R1b1	13	24	14	11	11	14	12	12	13	13	13	29	18	9	10	11	11	25	14	19	30	14	14	16	17	11	11	19	23	17	15	17	17	37	39	13	12	
Line Modal	R-B3bMH	√	R1b1c		13	24	14	11	11	14	12	12	13	13	13	29	18	9	10	11	11	25	15	19	30	14	14	-	17	11	11	19	23	17	15	-	17	38	38	13	12	

Chart 22
Breifne Groups: Subgroup B3: Part 1
O'Rourke Subgroup
Results & Patterns

			F	H	Marker Code																																						
Database	Breifne Clans Project		a	a	3	3	1	3	3	3	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	C	4	4		
	Subgroup B3: Part 2		m	p	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	5	4	3	4	4	6	6	6	6	6	A	C	C	5	0	7	7	D	D	4	3		
	O'Rourke Subgroup		l	l	3	0	1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8		
			l	o				a	b				i		ii		a	b								a	b	c	d		A												
			y	g			3																									I	I						a	b			
			r				9																										H	I	I								
			o	o			4																									4	a	b									
			r	u			√																																				
			FTDNA	p		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	26	27	28	29	30	31	32	33	34	35	36	37	
	Modal Haplotypes			L																																							
[not characterized]	S28MH	I	R1b1c10		13	24	14	10	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	30	15	15	16	17	11	11	19	23	16	15	19	17	36	38	12	12		
Colla Uais Dalriadic	CUDMH	n	R1b1c*		13	24	14	10	11	14	12	12	12	13	13	30	18	9	10	11	11	25	15	19	30	15	15	17	17	11	12	19	24	15	15	18	17	37	38	12	12		
Irish Type 3	IT III MH	e	R1b1c*		13	24	14	11	11	14	12	12	11	13	13	29	17	8	9	11	11	25	15	19	29	13	13	15	17	11	11	19	23	15	15	18	17	36	38	12	12		
South Irish	SIMH		R1b1c*		13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	37	38	13	12		
Northwest Irish	NWIMH		R1b1c7		13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12		
Super W Atlantic	SWAMH		R1b1c		13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	37	38	12	12		
Reynolds Rn-B3a																																											
Breifne CP	39183	JJR	1	R1b1c																																							
Breifne CP	N2316	SHPR	2	R1b1c																																							
Ysearch	8NN49	P-R																																									
Ysearch	N8Y2X	D-R																																									
Ysearch	PXEZ4	M-R																																									
Ysearch	T3RXE	JTR																																									
Line Modal Rn-B2aMH				√	R1b1c																																						
Reynolds GP	Group 3M Modal	Rn-3MMH	√	R1b1c																																							
Ysearch	DDCA2	Rn-DDCA2MH		R1b1c																																							
Smith Gb-B3a																																											
Breifne CP	63408	KES	1	R1b1c																																							
Boylan Bg-B3a																																											
Breifne CP	78819	C-B	1	R1b1c*																																							

Chart 23
Breifne Groups: Subgroup B3: Part 2
***O'Rourke Subgroup
Results & Patterns***

The six O'Rourkes in the BCP still show no matches at all among each other, and in fact show no matches at the 37-marker level with anyone else in the available general database of FTDNA (perhaps half of their over 120,000 records), except for one who has a single match with someone named Ward. With the augmentation mentioned above, however, they are finally beginning to show signs of some structure.

Some markers show values which deviate consistently from the SWAMH values. The columns for these anomalous values have been colored raspberry/dark pink to indicate a consistency of 80% within a lineage having at least four members. Where a deviant value extends consistently over more than one surname, at the raspberry/dark pink level for at least two surnames, the column is colored lemon yellow, with any SWAMH values shown in sky blue.

In Chart 22 above the profiles of three Roark/O'Rourke participants and two added Roarks show sufficient resemblance to be assigned to Line R-B3a. Similarly, the profiles of the other three Rourke/O'Rourke participants and the third added Roark have been assigned to Line Rd-B3b. The two O'Rourkes who trace their lineage to a Breifne origin are split between the two lines. Modal haplotypes have been constructed for these two lines, although they are yet incomplete at one or two markers each. The McTiernan pair (made up of the only two from Tg-B2a who have tested to the 37-marker level) shows some resemblance to O'Rourke Line Rd-B3a, and O'Rourke Line Rd-B3b has similarities with the Reynolds cluster. The single Smith and the single O'Baoigheallain (Boylan) show some slight resemblance to O'Rourke Line Rd-B3b. Six profiles of O'Rourkes who had tested to the 37-marker level were found on Ysearch, of which four are participants in the BCP; the other two profiles showed very divergent patterns and were not added here.

None of the O'Rourkes in the BCP or the Roarks added from the Roark Surname Project have been tested or estimated to be R1b M222.

In Chart 24 below none of the six Rourke/O'Rourke participants show any links with each other, which makes them even further apart from each other than does the lack of any matches. The profile pattern resemblance of one O'Rourke line to the McTiernan pair and of the other line to the Reynolds line continues to be given some slight support by weak to moderate links. The Reynolds pair shows no links with the McTiernan pair. The sample sizes are all still quite small here, though, and don't allow for firm conclusions. The Boylan technically showed no links, but had a 98.99% probability of a link with a McTiernan, so that was indicated in light purplish pink. The augmentations from other projects could not be used here because cross-project FTDNATiP calculations are not possible.

Evidence is accumulating the O'Rourkes do not belong as expected, on the

basis of data on other Breifne clans and on Ui Neill clans and in accordance with the traditional genealogies, to Haplogroup R1b M222. Further evidence presented here suggests that there are at least two O'Rourke clans within the Breifne area who are unrelated within the timeframe of surnames.

[illegible]

Chart 24
Breifne Groups: Subgroup B3
O'Rourke Subgroup
Generations to MRCA at 99% Probability

Group B4: Brady Subgroup

Group B4: Brady Subgroup is a cluster of five Bradys, four Donohoes and an O'Reilly, each representing a separate lineage. Half trace their lineage back to Breifne. All are known by test or estimated to belong to Haplogroup R1b1, and three are estimated to belong to R1b1c. None has had the Deep Clade test done. Chart 25 shows the names and origins of the members of this subgroup.

Code	Kit	Breifne Clans Project Subgroup B4 Brady Subgroup	H	Family Residential ID			Family Origins in Ireland				
			g	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County
			r								
			p								
		Brady Line Br-B4a									
PJB	40355	Patrick James Brady	R1b1c	Undetermined	Pennsylvania?	~1760	Unknown		Unknown	Unknown	Unknown
PEB	64488	Patrick Edward Brady	R1b1c	Milltown	Cavan		Milltown		Drumlane	Loughtee Lwr.	Cavan
EJCB	43749	Edw. Joseph Colm Brady	R1b1	Pollakeel	Cavan	≤1702	Pollakeel	≤1702	Denn	Loughtee Upr.	Cavan
J-B	63879	J. Brady	R1b1c	Ballinafunshoge	Wicklow	≤1816	Ballinafunshoge	≤1816	Derrylossary	Ballinacor N.	Wicklow
JPB	64487	John Peter Brady	R1b1c	Killashandra	Cavan		Killashandra		Killashandra	Tullyhunco	Cavan
		Donohoe Line Dn-B4a									
JJD	22934	John Joseph Donohoe	R1b1c	Lavey	Cavan	≤1885	Lavey	≤1885	Lavey	Loughtee Upr.	Cavan
BJD	14010	Bernard Joseph ("Brian") Donohue	R1b1c	Keenagh	Cavan	<1860	Clontycarnaghan	~1820	Templeport	Tullyhaw	Cavan
		Donohoe Line Dn-B4b									
GLD	35979	George Lanno Donoghue	R1b1	Not Given	Not Given		Not Given		Not Given	Not Given	Not Given
RED	61435	Robert Edmund Donahue	R1b1c	Wisconsin Rapids	Wisconsin	1914	Cork	~1821	Not Given	Cork	Cork
		O'Reilly Line Rg-B4a									
RWO'R	36683	Robert William O'Reilly	R1b1	Fishkill	New York	≤1830	Unknown	≤1791	Unknown	Unknown	Unknown

Chart 25
Breifne Groups: Subgroup B4
Brady Subgroup
Names & Origins

		F	H	Markers																																				
Breifne Clans Project	a	a	3	3	1	3	3	3	4	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	C	4	4		
Subgroup B4	m	p	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	4	3	4	4	6	6	6	6	6	A	C	C	5	0	7	7	D	D	4	3		
Brady Subgroup	l	l	3	0	1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8		
	l	o			or	a	b					i		ii	a	b							a	b	c	d		A												
	y	g			3																							I	I							a	b			
	r	r			9																							H	I	I										
Kit/ID	Code	o	o	4																							4	a	b											
	r	u		√																																				
FTDNA	p		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	26	27	28	29	30	31	32	33	34	35	36	37	
Modal Haplotypes		L																																						
[not characterized]	S28MH	l	R1b1c10	13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	30	15	15	16	17	11	11	19	23	16	15	19	17	36	38	12	12
Colla Uais Dalriadic	CUDMH	n	R1b1c*	13	24	14	10	11	14	12	12	12	13	13	30	18	9	10	11	11	25	15	19	30	15	15	17	17	11	12	19	24	15	15	18	17	37	38	12	12
Irish Type 3	IT III MH	e	R1b1c*	13	24	14	11	11	14	12	12	11	13	13	29	17	8	9	11	11	25	15	19	29	13	13	15	17	11	11	19	23	15	15	18	17	36	38	12	12
Northwest Irish	NWIMH		R1b1c7	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12
Super W Atlantic	SWAMH		R1b1c	13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	37	38	12	12
South Irish	SIMH		R1b1c*	13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	37	38	13	12
Brady Br-B4a																																								
40355	PJB	1		13	24	14	10	11	15	12	12	12	13	13	29	17	9	10	11	11	26	15	19	30	15	16	16	17	10	10	19	23	16	15	19	17	36	38	12	12
64488	PEB	2		13	24	14	10	11	15	12	12	12	13	13	29	17	9	10	11	11	27	15	18	30	15	16	17	17	10	10	19	23	16	15	18	17	35	39	12	12
43749	EJCB	3		14	24	14	10	11	15	12	12	12	13	13	29	17	9	10	11	11	26	15	19	30	15	16	17	17	11	10	19	23	17	15	18	17	37	38	12	12
63879	J-B	4		13	24	14	10	11	15	12	12	12	13	14	29	17	9	10	11	11	26	15	19	30	15	16	17	17	10	10	19	23	16	15	18	16	36	38	12	12
64487	JPB	5		13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	26	15	19	30	15	16	17	17	10	10	19	23	16	15	18	17	36	38	12	12
Line Modal	Br-B4aMH	√		13	24	14	10	11	15	12	12	12	13	13	29	17	9	10	11	11	26	15	19	30	15	16	17	17	10	10	19	23	16	15	18	17	36	38	12	12
Donohoe Dn-B4a																																								
22934	JJD	1		13	24	14	10	11	14	12	12	12	13	13	28	17	9	10	11	11	25	15	19	29	14	15	17	17	10	11	19	23	15	15	16	17	36	37	12	12
14010	BJD	2		13	24	14	10	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	30	14	15	17	17	10	11	19	23	15	15	16	17	37	38	12	12
Donohoe Dn-B4b																																								
35979	GLD	3		13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	36	37	12	12
61435	RED	4		13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	34	37	13	12
O'Reilly Rg-B4a																																								
36683	RWO'R	1		13	24	14	10	11	15	12	12	11	13	13	29	18	9	10	11	11	22	15	19	29	15	15	17	17	10	11	19	23	15	15	18	17	35	36	13	12

Chart 26
Breifne Groups: Subgroup B4
Brady Subgroup
Y-DNA Results & Patterns

SIMH, matching the SIMH at five or all of the six markers where the SIMH values display a characteristic deviation from the SWAMH values (light purplish pink columns). As noted in the last report, it appears that the two pairs belong to different lineages (and so descend from different eponymous ancestors named Donnchadh) on the basis of data from the O'Donoghue Society Project,³⁹ Comparisons of profile patterns made in this database indicate that one Donohoe pair (GLD & RED) belongs to the O'Donoghue of the Glens group and one (JJD) of the other Donohoe pair belongs to the group called O'Donoghue Mór (and so presumably would BJD). These O'Donoghue groups both are associated with Co. Kerry in the old kingdom of Desmond in the province of Munster.

As indicated in Chart 27, the Bradys are a coherent cluster, with each of them having links to all of the others ranging from strong to weak. Otherwise they appear to be fairly isolated so far within the BCP, showing only a few weak links with participants of other surnames who may well have Desmond origins. One of each pair of Donohoes has a weak link to a Brady and to one of the other Donohoe pair. The lone O'Reilly has no links to any of the Bradys and weak links to only one (the O'Donoghue Mór) Donohoe pair.

With the development of the SIMH there is further support for the suggestion, noted in the last report, that the Bradys may have an unexpected Munster origin, despite their strong association since at least the 13th century with the fairly distant old kingdom of Breifne.

Group O: Oriel Groups

The one member of Group O who has had the 'Deep Clade' test has not had his specific haplogroup identified and is negative for M222, the defining SNP for R1b1c7. He belongs to R1b1c, but not to any of its subclades that have been tested for. A further 13 members of this group are estimated to belong to R1b1c. As FTDNA tests for subclades one through eight, this indicates that these members of Group O are R1b1c but do not belong to Haplogroups R1b1c1 through R1b1c8.

Group O1: McGuire Subgroup

Group O1: McGuire Subgroup (McUrS) is made up of 21 individuals of six different surnames: McGuire/Maguire, Donohoe, McManus, Corrigan, Brady and Boylan. They represent 19 lineages, six McGuire, nine Donohoe, and one each of McManus, Corrigan, Brady and Boylan. They all belong to haplogroup R1b1. Chart 28 below shows the names and origins of the members of this group.

Chart 29 following displays the distinctive profile patterns of this subgroup. The values at eight of the first 37 markers deviate consistently from the SWAMH values over the subgroup (lemon yellow columns). At three of these eight markers the deviant values are the same as those in the NWIMH. As this represents only about a third of the markers with NWIMH values which deviate consistently from the SWAMH, these three columns are not given the NWIMH color code of lavender/light purple.

The McGuire line represented here also has a consistent non-SWAMH, non-NWIMH value at a further marker (colored raspberry/dark pink), which is matched by one of the Donohoe Lines Dn-O1a (which differs consistently from the McGuire line at two other markers) but not by the second Donohoe line or by any of the singletons.

The two Donohoe modal haplotypes are sufficiently different (with the McGuire modal haplotype intermediate) to suggest that these two lines may have branched off independently, descending from two separate Donnchadh Maguires.

The Brady conforms to the patterns here and does not seem to have any connection with the other Bradys in the project.

The Boylan profile shows only a minimal resemblance to the general profile pattern here, and was added primarily because the Boylans traditionally have the same origin as the McGuires.

Breifne Clans Project Group C1			H	Family Residential ID			Family Origins in Ireland				
Code	Kit	McGuire Subgroup	g	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County
			r								
			p								
McGuire Maguire			Ur-O1a								
WFMcUr	37023	William Francis McGuire	R1b1c	Northampton Co.	Pennsylvania	≤1752	unknown		unknown	unknown	unknown
RDMcUr	36994	Richard Duane McGuire	R1b1c	Mercer Co.	Kentucky	≤1794	unknown		unknown	unknown	unknown
CLMcUr	36996	Chanse Lang McGuire	R1b1c	Blount Co.	Tennessee	≤1799	unknown		unknown	unknown	unknown
AGMcUr	36359	Arlan George Maguire	R1b1	Enniskillen	Fermanagh	~1720	Enniskillen	~1720	Enniskillen	Tirkennedy	Fermanagh
BJMcUr	N30642	Brian James Maguire	R1b1c	Butlersbridge	Cavan	~1847	Butlersbridge	≤1847	Castleterra	Loughtee Upr.	Cavan
WAMcUr	50423	Willoughby Augusta McGwier	R1b1	Lauderdale Co.	Alabama	≤1846	unknown	≤1846	unknown	unknown	unknown
Donohoe Maguire			Dn-O1a								
BMD	43754	Bernard Michael ("Brian") Donohoe	R1b1c	Ballyheady	Cavan	≤1900	Doogary	≤1788	Kildallan	Tullyhunco	Cavan
M-D1	14008	Michael nm Donohoe	R1b1c	Darraugh	Cavan	≤1837	Darraugh	≤1837	Templeport	Tullyhaw	Cavan
JMD1	43742	James Martin Donohoe	R1b1c	Darraugh	Cavan	≤1837	Darraugh	≤1837	Templeport	Tullyhaw	Cavan
PJD2	43741	Patrick Joseph Donohoe	R1b1c	Gortinreddan	Fermanagh	~1840	Gortinreddan	~1840	Tomregan	Knockninny	Fermanagh
PJD4	43753	Patrick Joseph Donohoe	R1b1c	Derrylin	Fermanagh		Derrylin		Kinawley	Knockninny	Fermanagh
Donohoe Maguire			Dn-O1b								
JPD4	21575	John Patrick Donohoe	R1b1c	Ballyduffy	Longford	~1850	Ballyduffy	~1850	Killoe	Longford	Longford
JMD3	35470	James Mel Donohoe	R1b1c	Ballyduffy	Longford	~1850	Ballyduffy	~1850	(Dromard RC)	Longford	Longford
MJMD	37680	Martin James Michael Donohoe	R1b1	Greaghnacross	Cavan	~1830	Greaghnacross	~1830	Kildrumsherdan	Tullygarvey	Cavan
NAGO'D	103142	Nicholas Alexander Gordon O'Donoghue	R1b1c	Montreal	Canada	1802	Cork	≤1802	unknown	Cork	Cork
EJD	43752	Edward Joseph ("Eamonn") Donohoe	R1b1c	Derryheen	Cavan	~1872	Derryheen	~1872	Urney	Loughtee Upr.	Cavan
HJD	38187	Hugh Joseph Donohoe Jr.	R1b1c	Drumbo	Cavan		Drumbo		Kildallan	Tullyhunco	Cavan
McManus Maguire			Mn-O1a								
MMcMnB	10332	Morgan Mats Erik McManus Broman	R1b1c	Dublin	Dublin	~1864	unknown	~1827	unknown	unknown	(N.I.)
Corrigan			Cr-O1a								
PJC	43739	Patrick Joseph Corrigan	R1b1	Virgina	Cavan						
Brady			Br-O1a								
B-B	33734	B. Brady	R1b1c*	Castleshane	Monaghan		Castleshane		Monaghan	Monaghan	Monaghan
Boylan			Bg-B3a								
C-B	78819	Ciaran O'Baoigheallain	R1b1	Clerran	Monaghan	≤1816	Clerran	≤1816	Clontibret	Cremorne	Monaghan

Chart 28
Oriell Groups: Subgroup O1
McGuire Subgroup
Names & Origins

Breifne Clans Project	W	R	C	B	A	W	M	J	P	P	B	J	J	N	E	M	H	M	B	P	C
McGuire Subgroup	F	D	L	J	G	A	-	M	J	J	M	P	M	A	J	J	J	M	-	J	-
	McUr	McUr	McUr	McUr	McUr	McUr	D	D	D	D	D	D	D	G	D	M	D	McMn	B	C	B
Code		1					1	1	2	4		4	3	OD		D		B			

McGuire	WFMcUr	x	17	18	21	26	-	32/21	35/26	41/26	40/25	31/21	"11"	40/22	36/30	48/44	32/18	39/21	48/44	-
	RDMcUr1	17	x	21	24	30	-	33/25	37/31	41/31	42/29	33/25	38/17	41/26	38/35	-	33/21	40/25	50	-
	CLMcUr	18	21	x	25	31	-	34/26	38/32	44/32	43/30	34/25	38/18	41/26	33/25	-	34/21	41/26	50/32	-
	BJMcUr	21	24	25	x	35	-	42/29	45/37	45/37	44/34	41/29	39/21	42/30	46/40	-	40/25	42/29	50	-
	AGMcUr	26	30	31	35	x	-	40/37	40/37	45/37	-	39/35	41/26	43/30	-	-	38/30	45/37	-	-
	WAMcUr	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-
Donohoe	McGuire Ur-O1a																			
	M-D1	x	4					x	4	18	18	18	25	21	31	43	-	35/25	40/25	-
	JMD1	32/21	33/25	34/26	42/29	40/37	-	18	x	11	22	31	26	25	-	50	-	38/31	43/31	-
	PJD2	35/26	37/31	38/32	45/37	40/37	-	18	11	x	22	31	26	25	-	50	-	43/34	43/31	-
	PJD4	41/26	41/31	44/32	45/37	45/37	-	18	22	22	x	29	25	37	50	-	42/29	42/29	-	-
	BMD	40/25	42/29	43/30	44/34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Donohoe	Donohoe Dn-O1a																			
	JPD4	x	1					x	1	21	22	30	45	32/18	38/18	38/18	35/25	43/31	47/43	-
	JMD3	31/21	33/25	34/25	41/29	39/35	-	25	31	31	29	21	x	22	30	45	-	38/18	39/21	48/44
	NAGO'D	"11"	38/17	38/18	39/21	41/26	-	21	26	26	25	21	x	22	30	45	-	38/18	40/22	50/49
	EJD	40/22	41/26	41/26	42/30	43/30	-	31	25	25	37	22	22	x	32	30	-	35/25	43/31	47/43
	MJMD	36/30	38/35	33/25	46/40	-	-	43	-	-	50	30	30	32	x	-	-	41/38	49/47	-
	HJD	48/44	-	-	-	-	-	-	50	50	-	45	45	30	-	x	-	-	-	-
McManus	Donohoe Dn-O1b																			
	MMcMnB	32/18	33/21	34/21	40/25	38/30	-	35/25	38/31	43/34	42/29	32/18	38/18	38/18	35/25	41/38	x	39/18	45/37	-
Brady	McManus Broman																			
	B-B	39/21	40/25	41/26	42/29	45/37	-	40/25	43/31	43/31	42/29	39/21	39/21	40/22	43/31	49/47	39/18	x	43/30	-
Corrigan	PJC	48/44	50	50/32	50	-	-	-	-	-	-	48/44	48/44	50/49	47/43	-	45/37	43/30	x	-
Boylan	C-B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x

Chart 31
Oriol Groups: Subgroup O1
McGuire Subgroup
Generations to MRCA at 99% Probability

Both Donohoe lines are strongly linked with the McGuire line. The McManus is strongly linked with the McGuire line and also with one of the Donohoe lines. As in the previous report, these connections all support the tradition that a McGuire line in southeast Fermanagh branched off into McManus and McDonagh lines. The Corrigan line shows only weak links with the above, as

would be expected for a lineage that split off, before the adoption of surnames, from the same ancestral lineage which gave rise to the McGuire lineage. The Brady shows weak to moderate links with all the above lines. The WAMcUr McGuire and the Boylan show no links with any of the above within the limits set for this report, although the WAMcUr McGuire does show a partial resemblance to the McGuire modal haplotype. If the McGuires, the McManus and the Donohoes were to be treated as all belonging to the same surname, as perhaps they should, it can be seen from the numbers following the slashes that there would be a lot more red and orange in the linkage chart, indicating closer relationships, as can be seen in Chart 32 below.

According to tradition the McGuires are Airgialla and the Airgialla are a branch of the Connachta. Most of the participants with surnames associated with the Connachta fall into Haplogroup R1b M222, as discussed in the R1b M222 section of this report. These McGuires and their branches do not fall into Haplogroup R1b M222, which suggests that the McGuires are not Airgialla or that the Airgialla (at least that part associated with the McGuires) are not a branch of the Connachta. Given that about a third of the characteristically deviant values of the NWIMH are matched by this McGuire modal haplotype (Ur-O1aMH), the possibility also arises that the Ur-O1aMH is intermediate between the SWAMH and the NWIMH and branched off from a common ancestor before the M222 mutation occurred.

Breifne Clans Project	W	R	C	B	A	W		M	J	P	P	B		J	J	N	E	M	H		M		B		P	C		
McGuire Subgroup SS	F	D	L	J	G	A		-	M	J	J	M		P	M	A	J	J	J			-	-	J	-			
	McUr	McUr	McUr	McUr	McUr	McUr		D	D	D	D	D		D	D	G	D	M	D		McMn	B	C	B				
		1						1	1	2	4			4	3	O'D		D			B							
Code																												
McGuire																												
WFMcUr	x	17	18	21	26	-			21	26	26	25			21	"11"	22	30	44		18	39/21	48/44	-				
RDMcUr1	17	x	21	24	30	-			25	31	31	29			25	17	26	35	-		21	40/25	50	-				
CLMcUr	18	21	x	25	31	-			26	32	32	30			25	18	26	25	-		21	41/26	50/32	-				
BJMcUr	21	24	25	x	35	-			29	37	37	34			29	21	30	40	-		25	42/29	50	-				
AGMcUr	26	30	31	35	x	-			37	37	37	-			35	26	30	-	-		30	45/37	-	-				
WAMcUr	-	-	-	-	-	x			-	-	-	-			-	-	-	-	-		-	-	-	-				
Donohoe																												
M-D1	McGuire Ur-O1a																											
JMD1	21	25	26	29	37	-		x	4						25	21	31	43	-		25	40/25	-	-				
PJD2	26	31	32	37	37	-		4	x	18	18	18			31	26	25	-	50		31	43/31	-	-				
PJD4	26	31	32	37	37	-			18	x	11	22			31	26	25	-	50		34	43/31	-	-				
BMD	25	29	30	34	-	-			18	11	x	22			29	25	37	50	-		29	42/29	-	-				
Donohoe																												
JPD4									Donohoe Dn-O1a																			
JMD3	21	25	25	29	35	-			25	31	31	29			x	1												
NAGO'D	"11"	17	18	21	26	-			21	26	26	25			21	x	22	30	45		18	39/21	48/44	-				
EJD	22	26	26	30	30	-			31	25	25	37			22	22	x	32	30		18	39/21	48/44	-				
MJMD	30	35	25	40	-	-			43	-	-	50			30	30	32	x	-		18	40/22	50/49	-				
HJD	44	-	-	-	-	-			-	50	50	-			45	45	30	-	x		25	43/31	47/43	-				
McManus																												
MMcMnB	18	21	21	25	30	-			25	31	34	29			18	18	18	25	38		x	39/18	45/37	-				
Brady																												
B-B	39/21	40/25	41/26	42/29	45/37	-			40/25	43/31	43/31	42/29			39/21	39/21	40/22	43/31	49/47		39/18	x	43/30	-				
Corrigan																												
PJC	48/44	50	50/32	50	-	-			-	-	-	-			48/44	48/44	50/49	47/43	-		45/37	43/30	x	-				
Boylan																												
C-B	-	-	-	-	-	-			-	-	-	-			-	-	-	-	-		-	-	-	x	Boylan			

Chart 31
Oriol Groups: Subgroup O1
McGuire Subgroup
Branches Treated as Single Surname
Generations to MRCA at 99% Probability

Mixed Haplogroups Section

This section goes further than the preceding sections in terms of isolates, and assembles participants with no connection to any of the above groups or with any other participants in this project as far as 50 generations ago at the 99% confidence level.

The Y-DNA profiles of marker values for the members of this section vary greatly, but there are none which resemble the NWIMH.

Group X: Unassigned Participants

Those participants, whether of Irish or non-Irish or cryptic origins, not included in the above groups are included in Group X: Unassigned Participants (UP). They are subdivided into four subgroups: R1b Gaelic-Irish-Origin (RGIO) Lineages, Non-R1b Gaelic-Irish-Origin (xRGIO) Lineages, R1b Non-Gaelic-Irish-Origin (RxGIO) Lineages and Non-R1b Non-Gaelic-Irish-Origin (xRxGIO) Lineages.

Subgroup X1: RGIO

These 17 participants are all of Irish surnames but none so far shows any connection with any other participant in the BCP within the limits set for this report. The two Floods display no relationship.

The Y-DNA profiles also show no patterns which might indicate a relationship. Two participants have received results from the 'Deep Clade' test and both belong to an undefined subclade (or subclades) of R1b1c, which at present in terms of FTDNA testing means a subclade other than subclades c1 through c8. Nine other participants in this subgroup are also estimated to belong to R1b1c.

Applying the FTDNATiP calculator yields no links within the scope of this study.

The names and origins of the members of this subgroup are given in Chart 32 below.

Code	Kit	Breifne Clans Project	H g r p	Family Residential ID			Lineage Origins				
		Subgroup X1 RGIO		Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County (Ire.)/ Prov./State
MWB	46952	Michael William Boylen	R1b1c	Boston	Massachusetts	1840's	unknown	~1810	unknown	unknown	(Cavan?)
TJB-B	89273	Trevor James Breen-Browne	R1b1c	Sneem	Kerry		Sneem		Kilrohane	Dunkerron S.	Kerry
MAC	13875	Marshall Allen Cain	R1b1c*		North Carolina	1882					
T-C	89281	Terry Cullivan	R1b1c		Cavan						Cavan
BAO'D	22522	Brendan Anthony O'Donoghue	R1b1c	Coldblow	Offaly		Coldblow		Kilcomin	Clonlisk	Offaly
DMcCE	60163	David McCreary Earle	R1b1c	Groomsport	Down	~1740	Groomsport	~1740	Bangor	Ards Lwr.	Down
KPF	42035	Kevin Patrick Flood	R1b1c	Brooklyn	New York	≤1866	unknown	≤1844	unknown	unknown	unknown
JDF	58452	James Davis Flood	R1b1c	not given	not given		not given		not given	not given	not given
ESG	47681	Eugene Spencer Gaffney	R1b1	Bailieborough	Cavan	~1850	Bailieborough	~1850	Bailieborough	Clankee	Cavan
RDMcUr	19836	Robert Duane McGuire	R1b1	not given	Kentucky	~1780	unknown	≤1756	unknown	unknown	unknown
WAMcUr	50423	Willoughby Augusta McGwier	R1b1	Lauderdale Co.	Alabama	≤1846	unknown	≤1846	unknown	unknown	unknown
SEH	29956	Samuel Elvis Hanvey	R1b1	not given	not given		unknown		unknown	unknown	unknown
TTJM	91873	Thomas T.J. Murphy	R1b1								
LAR	94845	Lawrence Allan Reily	R1b1	various	South Carolina	≤1767	unknown	≤1767	unknown	unknown	unknown
GNR	81672	Glenn Newton Reynolds	R1b1c*	Lancaster Co.	Pennsylvania	1822	unknown	~1800	unknown	unknown	unknown
M-W	N2648	Michael Wynne (aka Guihan)	R1b1c	Corry	Leitrim	~1797	Corry	~1797	Inishmagrath	Dromahaire	Leitrim
H-O'S	91857	Henry O'Shea	R1b1c								

Chart 32
Unassigned Participants: Subgroup X1
**RGIO Subgroup
Names & Origins**

			H	Markers																																					
Breifne Clans Project			a	3	3	1	3	3	3	4	3	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	C	4	4		
Subgroup X1			p	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	5	4	3	4	4	6	6	6	6	6	A	C	C	5	0	7	7	D	D	4	3	
RGIO			l	3	0	1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8		
			o			or																						A													
			g			3							i		ii		a	b											I	I						a	b				
			r			9																							I	I											
Kit/ID		Code	o			4																						H	I	I											
			u																									4	a	b											
			FTDNA	p	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	26	27	28	29	30	31	32	33	34	35	36	37
Modal Haplotypes																																									
Somerled Lineage	SLMH	R1a		13	25	15	11	11	14	12	12	10	14	11	31	15	8	10	11	11	23	14	20	31	12	15	15	16	11	12	19	21	17	16	17	18	34	39	12		
[not characterized]	S28MH	R1b1c10		13	24	14	10	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	30	15	15	16	17	11	11	19	23	16	15	19	17	36	38	12	12	
Colla Uais Dalriadic	CUDMH	R1b1c*		13	24	14	10	11	14	12	12	12	13	13	30	18	9	10	11	11	25	15	19	30	15	15	17	17	11	12	19	24	15	15	18	17	37	38	12	12	
Irish Type III	IT III MH	R1b1c*		13	24	14	11	11	14	12	12	11	13	13	29	17	8	9	11	11	25	15	19	29	13	13	15	17	11	11	19	23	15	15	18	17	36	38	12	12	
South Irish	SIMH	R1b1c*		13	24	14	10	11	15	12	12	11	13	13	29	17	9	10	11	11	24	15	19	29	15	15	17	17	11	11	19	23	15	15	18	17	37	38	13	12	
Northwest Irish	NWIMH	R1b1c7		13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12	
Super W Atlantic	SWAMH	R1b1c		13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	37	38	12	12	
RGIO																																									
19836	RDMcUr	R1b1		13	24	14	10	11	14	12	12	11	13	13	30	18	9	10	11	11	25	15	19	30	13	15	16	17	11	10	19	23	15	15	18	17	37	37	12	12	
22522	BAO'D	R1b1		13	24	14	11	11	14	12	12	11	13	13	29	17	8	9	11	11	25	15	19	29	13	13	15	17	11	11	19	23	15	15	18	17	37	38	12	12	
29956	SEHH	R1b1		12	24	14	11	11	14	12	12	11	13	13	29	16	8	9	11	11	25	15	19	30	13	14	15	17	13	11	19	23	15	15	18	17	37	38	12	12	
89273	TJB-B	R1b1c		13	23	14	10	11	14	12	12	11	13	13	28	15	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	15	15	18	16	35	40	12	12	
13875	MAC	R1b1c*		13	24	14	10	11	14	12	12	12	13	13	29	18	9	10	11	11	25	15	19	29	15	15	16	17	11	10	19	23	15	15	17	19	38	38	13	12	
91873	TTJM	R1b1		14	24	14	11	11	15	12	12	12	13	13	29	18	9	11	11	11	25	15	19	28	15	15	15	17	10	11	19	23	15	17	18	17	37	42	13	12	
94845	LAR	R1b1		13	25	14	10	12	15	13	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	16	18	10	10	19	23	15	15	18	17	36	37	12	12	
46952	MWB	R1b1c		13	23	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	26	14	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	38	12	12	
81672	GNR	R1b1c*		13	23	14	11	11	15	12	12	12	14	13	30	17	9	9	11	11	25	14	19	29	17	17	18	18	12	11	19	22	15	14	16	19	38	38	12	12	
60163	DMcCE	R1b1c		13	24	14	11	11	14	12	12	13	13	13	29	16	9	10	11	11	24	15	19	27	15	16	17	18	11	11	19	23	15	15	18	16	36	38	12	13	
47681	ESG	R1b1		13	24	14	10	12	14	12	12	14	13	13	29	17	9	9	11	11	25	15	19	30	14	15	16	16	11	11	19	22	17	15	16	17	37	39	11	12	
N2648	M-W	R1b1c		13	24	14	11	11	14	12	12	11	14	13	31	17	9	9	11	11	25	15	18	29	15	15	17	17	11	11	19	23	16	15	18	18	39	42	12	12	
42035	KPF	R1b1		13	24	14	11	11	14	12	12	12	13	13	29	18	9	9	11	11	25	15	19	30	14	14	15	15	11	11	19	22	16	15	18	16	40	40	12	13	
58452	JDF	R1b1		13	24	14	11	11	14	12	12	12	13	13	29	18	9	10	11	11	25	15	19	31	15	15	16	17	11	11	19	23	16	13	16	16	37	39	12	12	
50423	WAMcUr	R1b1		13	24	14	11	12	14	12	12	12	13	13	29	17	9	9	11	11	25	15	19	31	15	15	16	17	11	11	19	23	17	15	17	17	35	36	12	12	
91857	H-O'S	R1b1c		13	25	14	11	11	15	12	12	11	13	13	29	18	9	10	11	11	25	15	19	28	15	16	17	18	11	11	19	23	16	15	17	16	37	37	12	12	
89281	T-C	R1b1c		13	25	14	12	11	13	12	12	11	13	13	30	19	9	10	11	11	25	15	18	31	15	16	16	17	11	11	19	23	16	16	18	17	37	38	12	12	

Chart 33
Unassigned Participants: Subgroup X1
RGIO Subgroup
Results & Patterns

There are a few potential assignments indicated by color coding in Chart 33 above. The results profile of one of the participants conforms fairly well with the Colla Uais Dalriadic Modal Haplotype, matching five of the seven marker values characteristically deviating from the SWAMH.

Two other participants are even closer to the Irish Type III Modal Haplotype in terms of their results profiles, one matching at six and the other at seven of the eight characteristically deviating marker values.

There are also four participants whose results profiles somewhat resemble the South Irish Modal Haplotype (SIMH), although not as closely, each of them matching at only three of the six characteristically deviating marker values. They could perhaps be placed with the O'Reilly and the Donahue/Donoghue pair in Brady Subgroup B4, who match the SIMH more closely.

Subgroup X2: xRGIO

This subgroup includes at present only a single participant who belongs to Haplogroup I1c. What is known about the origins of this haplogroup may be viewed on the National Geographic website for the Genomic Project at:

<http://www5.nationalgeographic.com/genographic/atlas.html> ("Atlas of the Human Journey" tab > "Genetic Markers" button). I1c is most common in Germany. This is the sole participant so far in the BCP at the 37-marker level with a traditionally Breifne surname (McReynolds) who is not R1b. His earliest known ancestor is placed in early 18th-century Co. Tyrone and used the semi-Gaelic form McRannells (derived from the Norse forename Rögnvaldr, 'ruler of the gods'), which could be of either Irish or Scottish origin.⁴⁰

Since there is only one non-R1b1 participant in this subgroup, he is consolidated in the charts with the other non-R1b1 participants in Subgroup X4.

Subgroup X3: RxGIO

The seven members of this subgroup belong to lineages that are of Western European but non-Gaelic-Irish origin. Two of these lineages are of English origin, two of French origin, one of Norman origin and one of uncertain (Irish, Scottish or English) origin.

Code	Kit	Breifne Clans Project	H g r p	Family Residential ID		From	Lineage Origins				
		Subgroup X3 RxGIO		Address	State/Prov. /County		Townland	Year	Civil Parish	Barony	County (Ire.)/ Prov./State
AVdeC	73518	Aymar de Vincens de Causans	R1b1c*	Château de Causans	Provence		Orange	~1000			Provence
OIC	82606	Obed Ithel Clark	R1b1c								
TWD II	11741	Thomas Wilson Dibblee Jr.	R1b1c	Rancho San Julian	California	1867	Glastonbury?	~1590			Somersetshire
AJFG	89278	Adrian James FitzGerald	R1b1c	Valencia	Kerry	≤1880	Shanid	≤1214	Kilmoylan	Shanid	Limerick
TJP	43755	Timothy John Parrott	R1b1c*	"Baywood"	California	1860		<1700			England
JdeT	89275	Jacques de Tristan	R1b1c	Château d'Herbault- -en-Sologne	Loire			≤1378			Orléanais

Chart 34
Unassigned Participants: Subgroup X3
***RxGIO Subgroup
Names & Origins***

The names and origins of the members of this subgroup are given in Chart 34 above, and the results profiles are given in Chart 35 below.

R1a1 have had the Deep Clade test.

One of the lineages represented by these participants is of ancient Scotto-Norse origin, one is of Polish origin, two are of 17th-century American colonial (ultimately English) origin and two are of uncertain (Irish, Scottish or English) origin.

Breifne Clans Project			H	Family Residential ID			Lineage Origins				
		Subgroups X2 & X4	g	Address	State/Prov.	From	Townland	Year	Civil Parish	Barony	County (Ire.)/
		xRGIO & xRxGIO	r		/County						Prov./State
Code	Kit		p								
<u>xRGIO</u>											
WAMcR	12835	William Andrew McReynolds	I1c	Killyman Par.	Armagh	≤1715	not stated	≤1715	Killyman	Dungannon Middle	Armagh
<u>xRxGIO</u>											
JCB	89279	Jeffery Clay Brooks	I1a		Georgia						England
GJM	68867	Gordon Jack Morrow	I1a	not given	North Carolina	≤1770	unknown	≤1770	unknown	unknown	unknown
MLM	19593	Michael Leo Murray	I1c	Oakville	Ontario		unknown				(Scotland?)
GAN III	19594	George Aylmer Newhall III	I1c	Rancho San Francisco	California	1875	Saugus	1630			Massachusetts
RCMcD	64494	Randal Christopher MacDonnell	R1a1*	"The Glens"	Antrim	1399	Isla	~1200			Hebrides
D-J	105076	Donald Jakubczak	R1a								Poland

Chart 36
Unassigned Participants: Subgroups X2 & X4
xRGIO & xRxGIO Subgroups
Names & Origins

The names and origins of the members of these subgroups are given in Chart 36 above, and the marker value profiles are given in Chart 37 below.

Swordenheim, Project Manager of the Scandanavian Y-DNA Project,⁴¹ as well as to the Somerled Lineage Modal Haplotype (SLMH) referred to in the Introduction. The SWAMH is used here as a reference modal haplotype, perhaps not the best choice, but useful. The MacDonnell participant, as might be expected, is much closer to the SLMH than is the Jakubczak participant, differing from the SLMH in the values at only four of the 24 markers of the first 37 markers where the SLMH differs from the SWAMH. The SLMH differs by only one marker value from the ONMH, and here both participants match the SLMH.

Summary

More evidence has been gathered to support the conclusion that the extensive web of strong-to-loosely interlinked profiles of the Mixed Breifne Surnames (MBS) group represents lineages of the Ui Briuin Breifne, and that the participants belonging to this network are all R1b M222. A significant aberration is the presence of participants surnamed Clancy in this group, as this clan is traditionally not of the Ui Briuin nor even of the Connachta.

The MBS so far appears to be composed of two subgroups which differ somewhat from each other and from the R1b M222 modal haplotype, a Donohoe-McTiernan subgroup and an O'Reilly-McGovern subgroup, and a third subgroup of assorted surnames, including the O'Conors and the Clancys, which is intermediate between the other two and somewhat closer to the R1b M222 modal haplotype.

Several isolated subgroups, all R1b but not R1b M222, are taking shape as more data is gathered. The surnames involved are all traditional Breifne surnames. One subgroup is composed only of Donohoes and another is made up only of McTiernans. Another is a subgroup of surnames weakly linked with six assorted O'Rourke lineages, none of which are even weakly linked with each other but which appear to fall into two unrelated clans on the basis of their marker value profiles, one of which shows moderate links with an isolated McTiernan pair and the other of which has a marker value profile resembling that of the Reynolds, a non-Ui Briuin Breifne clan. A fourth subgroup includes a tightly linked group of Bradys weakly linked to two Donohoe pairs, themselves only weakly linked, one pair of which conforms to the South Irish Modal Haplotype and both pairs of which fit into the two main unrelated O'Donoghue of Kerry clans, all supporting the impression that the Bradys of Breifne fame are of Munster origin.

The Oriel Group continues to be made up of a tightly linked cluster of McGuires (five lineages) and two historical branches of the clan, Donohoes (eight lineages) and McManuses (one lineage), with a couple of weakly linked representatives of other surnames. The Donohoe lineages fall into two clusters with the McGuire lineages intermediate to those two clusters. Although the members of this group are not R1b M222, the marker value profile of the McGuire modal haplotype matches the NWIMH at about a third of the markers where the NWIMH deviates from the SWAMH, suggesting that the McGuire modal is intermediate between the SWAMH and the NWIMH and branched off from a common ancestor before the M222 mutation occurred.

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