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Pinpointing the Gamble Paternal Ancestral Genetic Homelands A Scottish Case Study

www.Scottishorigenes.com



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

Dr Tyrone Bowes

29th March 2023

Introduction

A simple painless commercial ancestral Y chromosome DNA test will potentially provide one with the names of many hundreds of individuals with whom one shares a common male ancestor, but what often perplexes people is how one can match lots of individuals with many different surnames? The answer is quite simple. Approximately 1,000 years ago, one's direct medieval male ancestor, the first for example to take the 'Campbell' surname was living near others with whom he was related but who took other surnames like MacDowall, MacKie, and MacClellan. Given that 1,000 years have passed since paternally inherited surnames became common, there will be many descendants of those individuals some of whom will today undergo commercial ancestral Y-DNA testing. Hence the surnames of one's medieval ancestor's neighbours will be revealed in today's Y-DNA test results.

Early 19th century census data demonstrates that Irish and Scottish surnames could still be found concentrated in the areas from which they originated. One can therefore use census data to determine the origin of the surnames that appear in one's Y-DNA results, identifying an area common to all, and reveal ones '**Paternal Ancestral Genetic Homeland.**' The genetic homeland is the small area (usually within a 5-mile radius) where one's ancestors lived for hundreds if not thousands of years. It is the area where one's ancestor first inherited his surname surrounded by relatives who inherited others. It is the area where one's ancestors left their mark in its placenames, its history, and in the DNA of its current inhabitants. Since modern science can pinpoint a paternal ancestral genetic homeland, it can also be used to confirm it by DNA testing individuals from the pinpointed area.

Notes of caution!

1. Science has demonstrated that each of the estimated 1,500 unique Irish surnames had a single founding male ancestor (a Surname-Adam), which is an estimated 1,500 Adams from whom anyone with Irish ancestry (and with one of those unique surnames) can trace direct descent. But science has also demonstrated that only 50% of males with an Irish surname will be related to their surnames founding ancestor, the other 50% of people will have an association that has arisen because of what are called 'non-paternal events,' usually a result of adoptions or maternal transfer of the surname. Since Scotland adopted a similar clan-based society these scientific findings can be applied to Scotland and people with Scottish paternal ancestry.
2. Often people are looking for their DNA results to trace back to a specific area. One must remember that the results typically reflect one's ancestor's neighbours from around 1,000 years ago (when surnames first appeared). As a result, if one's Scottish ancestor was descended from an Irish or Anglo-Saxon settler, Viking raider, or 12th Century Conquering Norman, one's DNA results will reflect earlier Irish, English, Welsh, French, and possibly Scandinavian origin. One must approach this process with an open mind!

'Gambell' Y-DNA Case Study

Interpreting the Y-DNA test results

To pinpoint a paternal ancestral genetic homeland, one must first identify the surnames that appear as one's closest genetic matches upon commercial ancestral Y-DNA testing. Those surnames, particularly ones that recur among one's closest genetic relatives will typically reflect the surnames of one's medieval ancestor's neighbours. Mr. 'Gamble's' closest and most frequent genetic surname matches as revealed upon commercial ancestral Y-DNA STR and SNP testing are detailed in **Figures 1, 2, 3, and 4.**

Y-DNA 111 Marker STR Matches							
Surname	Match Date	Markers Tested	Genetic Distance	Big Y STR Differences	Y-DNA Haplogroup	Paternal Country of Origin	Earliest Known Ancestor
Gambell	December 30 2022	1 to 111	5	Not Available	R-M269	Unknown Origin	
Bailey	December 30 2022	1 to 111	7	Not Available	R-M269	United States	Sir George Thomas Wyatt 1550-1623
Walker	December 30 2022	1 to 500	9	8 of 537	R-BY36577	Ireland	John Patrick Duffy b. 1755 and d. 1832
CLARK	December 30 2022	1 to 111	9	Not Available	R-M269	Unknown Origin	
Campbell	December 30 2022	1 to 111	9	Not Available	R-M269	Unknown Origin	John Campbell (c1728) of VA
Grimes-Wyatt	December 30 2022	1 to 111	9	Not Available	R-M269	Unknown Origin	edmund wyatt, b. 1765 and d. 1844
O'Donnell	December 30 2022	1 to 111	9	Not Available	R-M269	Ireland	John O'Donnell, b 1810 and d. bef 1857
Skinner	December 30 2022	1 to 111	9	Not Available	R-A725	Scotland	Thomas Skinner b.1672 in Minimal File, Scotland
Thompson	December 30 2022	1 to 111	9	Not Available	R-M222	Unknown Origin	James Thompson, b. 1780, NC
Cannon	December 30 2022	1 to 700	10	11 of 608	R-BY35771	Ireland	Condy Cannon, 1859 - 1926
Newell	December 30 2022	1 to 700	10	15 of 678	R-BY64330	Unknown Origin	
Kelly	December 30 2022	1 to 700	10	15 of 677	R-BY165194	Ireland	Laurence Kelly b1805 d1885
Gough	December 30 2022	1 to 700	10	16 of 671	R-FT168987	Ireland	Peter Gough (1802 Co. Monaghan, IRE)
Shaughnessy	December 30 2022	1 to 700	10	15 of 562	R-FTC80301	Ireland	William Shaughnessy b. 1800 d.
Raines	December 30 2022	1 to 700	10	15 of 535	R-BY144293	Ireland	Thomas McClanahan b. 1838 and d. 1893
Kesley	January 04 2023	1 to 700	10	20 of 670	R-FT138573	Ireland	Michael Kesley, b. 1834 and d. 1914
Wanuch	December 30 2022	1 to 700	10	20 of 657	R-FT81271	Wales	Dennis Price/Dorothy Price (Moore)
McBride	December 30 2022	1 to 700	10	19 of 613	R-FGC30692	Unknown Origin	Michael McBride b. 1861
McCurdy	December 30 2022	1 to 700	10	21 of 661	R-BY35723	United States	Nasa McCurdy, b. 1755 PA, d. 1829 PA
Graham	December 30 2022	1 to 700	10	22 of 646	R-A12547	United States	John Owensley, b. c1732 VA - (Non-Paternal Event)
Murphy	December 30 2022	1 to 700	10	23 of 650	R-BY140656	Ireland	James Graham b. 1787 Venango, PA and d. 1864
Coyne	December 30 2022	1 to 500	10	13 of 630	R-BY12146	Ireland	John MURPHY, b. 1789
Coyne	December 30 2022	1 to 500	10	15 of 569	R-BY21246	Ireland	Thomas Coyne, b. ca. 1830 nr Athlone
McClanahan	December 30 2022	1 to 500	10	16 of 498	R-BY144293	Ireland	James Coyne, res. Co. Roscommon, b. ca. 1766
Toller	December 30 2022	1 to 500	10	19 of 555	R-BY157772	Unknown Origin	Thomas McClanahan b. c. 1640, Strabane, Ireland
Brents	December 30 2022	1 to 111	10	Not Available	R-M222	Northern Ireland	Unknown
Burns	December 30 2022	1 to 111	10	Not Available	R-M269	Unknown Origin	William Burns, b1814 d1898
Byrne	December 30 2022	1 to 111	10	Not Available	R-M269	Ireland	Thomas Byrne b. 1820 d.
Connelly	December 30 2022	1 to 111	10	Not Available	R-M269	Ireland	James Connelly, born before 1831, Ireland
Coyle	December 30 2022	1 to 111	10	Not Available	R-M222	Ireland	Thomas Coyle, b. ca. 1800, Ireland nr. Athlone
Cumming	December 30 2022	1 to 111	10	Not Available	R-A725	Scotland	Robert Cumming b. 1840 d. 1914 diff surname before
Daley	December 30 2022	1 to 111	10	Not Available	R-M269	Unknown Origin	
Donnelly	December 30 2022	1 to 111	10	Not Available	R-M269	Ireland	John Donnelly abt. 1800
Gallagher	December 30 2022	1 to 111	10	Not Available	R-M222	Ireland	Charles Gallagher b. 1891 and d. 1963
Keith	December 30 2022	1 to 111	10	Not Available	R-M269	Scotland	William Keith b. 1834 and d. 1893
Maddox	December 30 2022	1 to 111	10	Not Available	R-M269	Unknown Origin	JAMES DANIEL Maddox, b. 25 December 1842 SC USA, D
McBride	December 30 2022	1 to 111	10	Not Available	R-M269	Ireland	John McBride 1789 - 1849
McCrae	December 30 2022	1 to 111	10	Not Available	R-M269	United States	William Robert McCrae, b. 1828 and d. 1906
O'Donnell	December 30 2022	1 to 111	10	Not Available	R-A725	Northern Ireland	Jacob O'Donnell b. 1803 d. 1842 in Co Down
Price	December 30 2022	1 to 111	10	Not Available	R-M269	Wales	Edmund Price m. Jane Webb d. New Brunswick, Canada
Wiedeman	December 30 2022	1 to 111	10	Not Available	R-M269	United States	Augustus McClanahan, 1789-1872
Wilmsh	December 30 2022	1 to 111	10	Not Available	R-M269	Unknown Origin	

Figure 1: Snapshot of test subject 'Gamble's' closest genetic surname matches as revealed in a Y-DNA STR database. The more Y-DNA STR markers two people share, the more recent their shared paternal ancestor once lived. The test subject's closest Y-DNA STR genetic surname matches are **NOT RANDOM**; he matches others named 'Gamble' (black arrow) together with individuals with Scottish or Irish-associated surnames, some of which like McBride and O'Donnell (coloured arrows) recur among his Y-DNA STR results. In addition, the test subject tested positive for the R-M222 paternal marker which first appeared in Ireland before spreading into Scotland. Highlighted font denotes each surnames associated ethnicity or location of an earliest recorded paternal ancestor; Scottish/Scotland, Irish/Ireland, Irish/Scottish, English/England, Mainland European.

Test Subject	Haplogroup	Closest Recurring Y-DNA STR Surname Matches						
		111 Markers			67 Markers			
		Genetic Distance						
Gamble	R-M222	5	9	10	5	6	7	
				Coyne(x7)			Atkinson(x3)	
				Byrne/Burns/Burne(x5)			Doherty/Dougherty(x3)	
				Graham(x5)			Dowd(x4)	
				Gough/McGough(x4)			Frew(x3)	
				McBride(x4)	McDowell/McDouall(x4)	McDonald(x3)	Gilmer/Gilmores(x3)	
				Clark/Clarke(x5)	McClellan/McClelland(x3)	McDougal/McDougal(x4)	McCahan/McCahan/McCaughan/McCaughn(x6)	
				Campbell(x4)		Dumny(x6)	McGee/Magee/McGhee(x5)	
				O'Donnell(x7)		Ryan(x3)	McLaughlin/McGlohan/McLawhon(x5)	
				Daley/Daly(x3)		Williams(x6)	Meredith/Merideth(x4)	
		Donnelly/Dancelly(x3)			Sweeney(x4)			
		Kelly/Kelley(x3)			Wilson(x3)			
		McClanahan/McClanahan(x3)						
		Shaughnessy(x3)						

Figure 2: Mr. 'Gamble's' closest recurring Y-DNA STR genetic surname matches. Surnames are shown at the point at which the first appear as a genetic match, figures in brackets represent the number of individuals with each surname at the 111 and 67 marker levels that recur 3 times or more. For example, the first Campbell to appear as a paternal genetic relative shares 102 of 111 genetic markers, although not all 4 males named Campbell may not match at that level. The test subject's closest recurring genetic matches are **NOT RANDOM**; they are dominated by Scottish and Irish surnames which is typical for his R-M222 paternal genetic marker which first appeared in Ireland before spreading into Scotland. Highlighted font indicates each surnames associated ethnicity; Irish, Scottish, Irish/Scottish-associated.

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Upon commercial ancestral Y-DNA testing the test subject matched others named ‘Gamble,’ who tested independently, see **Figures 1** and **2**. This indicates that the test subject is either directly descended from a Gamble-Adam, literally the first male (‘Adam’) to take that surname who lived approximately 1,000 years ago when paternally inherited surnames became common or that the Gamble surname has been in his paternal line for many hundreds of years. The test subject’s Y-DNA results are dominated by both Scottish and Irish surnames, which is typical of his R-M222 paternal genetic marker which first appeared in Ireland before spreading into Scotland, see **Figures 1** and **2**.

The STRs examined in the Y-DNA111 test are short repetitive sequences of DNA that can be amplified or deleted with each generation. In contrast, SNPs are far more permanent mutations. SNP testing can offer a more accurate glimpse of the precise chronological development of surnames among related males. SNP testing reveals that the Y-DNA revealed surnames are not random, and are dominated by Scottish and Irish surnames, see **Figures 3** and **4**. A closer examination of the repetitive SNP surname matches reveals that the Scottish-associated Wright, Clark, Alexander, McDowall, and McKee surnames are most closely linked, and have arisen among related Scottish males living in a specific part of Scotland, see **Figure 4**.

Closest Y-DNA SNP Matches					
Surname	Match Date	Haplogroup	Non Matching Known SNPs	Big Y STR Difference	Paternal Ancestor
Clark	1/16/2023 12:48:23 PM	R-FGC42105	6995512, 19895071, FTA3894, 8259	10 of 667	Charles Clark, b. 1851
Wright	1/16/2023 12:48:26 PM	R-FTC36596	150, FT138282, FT140075, 8259638	16 of 636	Andrew John Wright b. abt 1809 South Carolina
Alexander	1/16/2023 12:48:24 PM	R-FT100543	0, FT100543, FT244591, FT101936,	9 of 624	James Alexander b. Abt.1747 d.1827
McBride	1/16/2023 12:48:21 PM	R-BY470	BY117801, BY26364, BY26365, BY2	18 of 583	
Bradner	1/16/2023 12:48:21 PM	R-BY168456	29, BY43854, BY21194, BY117801, R	23 of 551	Joseph Bradner 1807 Oldboleys, Wicklow Ireland
Bancroft	1/16/2023 12:48:20 PM	R-BY25911	6364, BY26957, BY26958, BY26962,	10 of 519	Stanley John Bancroft, b. 1909 and d. 1982
McDowell	1/16/2023 12:48:21 PM	R-FGC68163	63, BY26364, BY26365, 7345172, 13	13 of 513	Joseph McDowell b 1840 d 1912
McGarvey	1/16/2023 12:48:21 PM	R-FT3074	2273538, FT3074, 17148136, FT466	11 of 671	Dennis McGarvey
Mackay	1/16/2023 12:48:21 PM	R-BY172979	FT12253, FT48473, FT98670, FT321	18 of 674	Andrew MACKAY/McKAY 1819-1887 Girvan, Ayrshire, Sc
Watson	1/16/2023 12:48:23 PM	R-BY202797	BY227601, FT39894, 3786823, 1893	10 of 659	George Watson, b. 1739 MD; d. 1822 WV
Mullins	1/16/2023 12:48:21 PM	R-BY178847	80827, RS79412108, BY178847, BY1	13 of 558	Robert Fleming b. ca. 1773 Ireland
LIND	1/16/2023 12:48:20 PM	R-BY155439	84, BY27077, FT178716, BY153570, 8	17 of 563	James Lind, abt 1655 Mosshatt, Lanarkshire,
McNeill	1/16/2023 12:48:20 PM	R-A4697	BY28804, Y45076, 7695318, 1281471	13 of 572	George Charles Neil 1747-1814 Tranent, Scotland
Farrell	1/16/2023 12:48:20 PM	R-BY125828	91, BY28804, BY88259, 13653475, B	17 of 533	Charles Farrell b1785 Westmeath/Longford IRE
Treacy	1/16/2023 12:48:20 PM	R-S673	Y21194, BY117801, BY26365, BY287	25 of 577	William Treacy b. 1855 and d. 1899
FINLEY	1/16/2023 12:48:21 PM	R-BY184845	Y185215, 15928073, BY185651, 189	21 of 558	John McGill, 1792-1882
Galyean	1/16/2023 12:48:20 PM	R-BY25917	21194, BY117801, BY26364, BY288	10 of 490	Thomas Gallion b. 1758 MD, and d. 1828 IN
Clinton	1/16/2023 12:48:27 PM	R-FT370763	01, BZ3670, FT440003, FT370763, F	14 of 682	Jon Robt Clinton 1761 Laurens SC -1841 Crawfd MO
Lyons	1/16/2023 12:48:26 PM	R-FT222521	BY113174, BY117801, FT221005, FT	9 of 663	
McDougal	1/16/2023 12:48:26 PM	R-A11307	B51, BY21194, BY117801, BY226664	22 of 664	
Brady	1/16/2023 12:48:27 PM	R-FT303866	576, FT306051, 8259638, 7340920, 1	16 of 669	Mr. Mr. James Shields, b. 1860
Eakin	1/16/2023 12:48:24 PM	R-FT129397	12, FT128562, FT128693, FT128818	15 of 664	Nathaniel Eakin b1795 Shanco Monaghan
McKeown	1/16/2023 12:48:23 PM	R-BY25911	B2, FGC19851, BY21194, BY117801,	17 of 656	John McKeown 1750 (S668+)
Clark	1/16/2023 12:48:23 PM	R-FT226418	117801, FGC57921, FT432053, FT22	17 of 641	Francis Clark, Sr. born about 1690 Sligo, Ireland
Hope	1/16/2023 12:48:24 PM	R-BY171706	B733, BY31357, FT27528, FGC62103	17 of 579	
Alexander	1/16/2023 12:48:24 PM	R-FT102660	01936, FT102660, FT103452, 13506	13 of 602	Ephraim K Alexander, b 1843
Brown	1/16/2023 12:48:24 PM	R-BY76755	4310, FT354049, FT354050, 401611	14 of 635	James Brown b1825-d bef 1870
Strain	1/16/2023 12:48:20 PM	R-BY18252	801, BY26754, BY30625, BY43096, 6	9 of 537	John Strayen/Strain b.7-d/ 1752 PA

Figure 3: Snapshot of test subject Gamble’s closest Y-DNA SNP genetic surname matches. The more Y-DNA SNP mutations two people share the more recent their shared paternal ancestor once lived. The test subject’s closest Y-DNA SNP genetic surname matches are **NOT RANDOM**; they are dominated by individuals with Scottish or Irish-associated surnames, some of which like Clark (**yellow arrows**) recur among his SNP results. Highlighted font indicates the ethnicity associated with each surname: **Scottish/Scotland**, **Irish/Ireland**, **Irish/Scottish-associated**, **English/England**.

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Closest Recurring Y-DNA SNP Surname Matches		
Surname	Frequency	Min. SNP difference
Clark	3	20
Wright	4	20
Alexander	6	21
McDowell	4	22
McKee	8	25
O'Dogherty	22	25
McCauley	3	26
Duncan	4	26
Eakin	8	26
Boyle	3	28
McConaghy	7	28
McGee	3	29
O'Donnell	3	30

Figure 4: Mr. Gambell's closest Recurring SNP matches reveal a Scottish paternal origin. SNP testing revealed 249 genetic relatives, 78 of whom had surnames that recur 3 times or more (detailed). The closest and most frequent SNP matches are dominated by Scottish Clark, Wright, Alexander, McDowell, and McKee. These results indicate that the test subject's most recent paternal ancestor as revealed by Y-DNA SNP testing was living in a specific part of Scotland, and among males who take the Clark, Wright, Alexander, McDowell, and McKee surnames. Highlighted font indicates the ethnicity associated with each surname: **Scottish**, **Irish**, **Irish/Scottish-associated**.

The Gambell Surname in Ireland

Although the test subject's Y-DNA results revealed a mix of Irish and Scottish associated surnames, early census data reveals that the 'Gambell' surname is only associated with Ireland. The 1911 census of Ireland revealed 1,638 individuals named Gambell. Distribution mapping reveals that those individuals were not scattered uniformly throughout Ireland but concentrated in Ulster, see **Figure 5**. Farmers with each surname could still be found in early census data concentrated in the area where their surname first appeared or in the area where one's ancestors first settled. The 1901 census of Ireland revealed 3 distinct groups of Protestant farmers named Gambell in Ulster in Northern Ireland, see **Figure 6**. These results indicated that the Irish Gambells are descended from Scots who arrived in Ireland in around 1600AD during the Plantation of Ulster. The lack of Gambells in Scotland could indicate that the Gambell surname has gone extinct in its native Scotland or that it is an Irish corruption of a similar Scottish surname.

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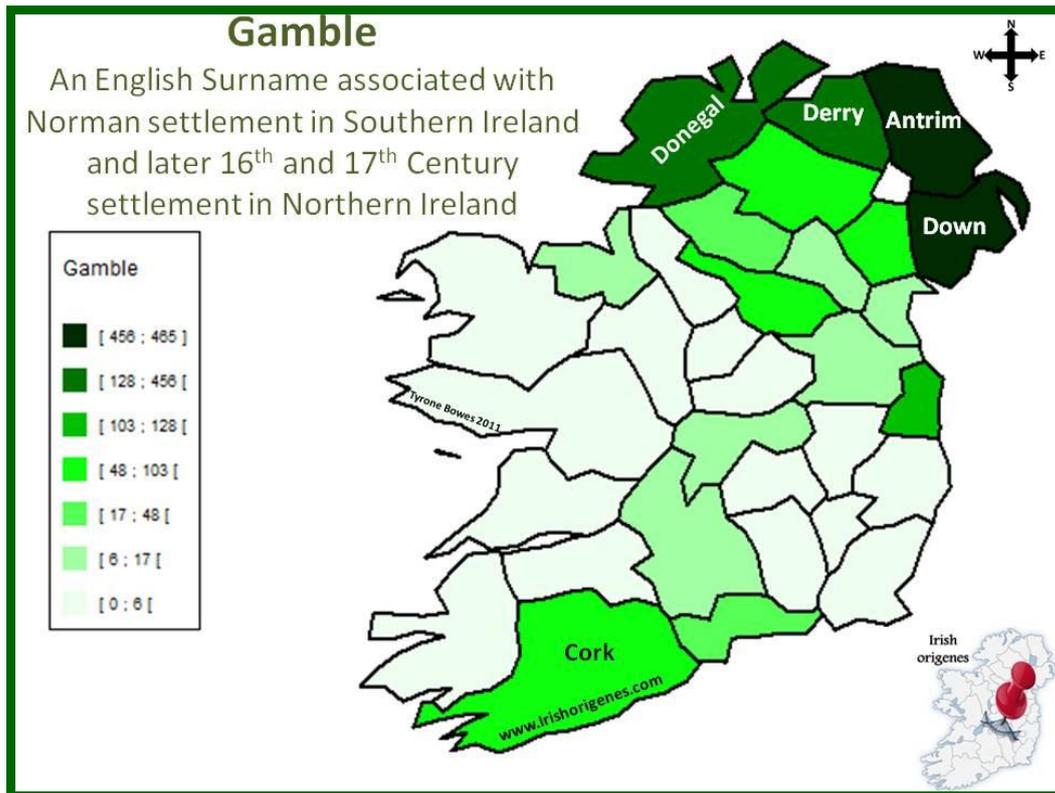


Figure 5: Distribution mapping of the Gamble surname in Ireland. An examination of the distribution of all individuals named Gamble in 1911 reveals that they are not distributed evenly throughout Ireland but concentrate in specific Irish counties. Image taken from the Irish Surnames database, free to view <https://www.irishorigenes.com/surnames-database>

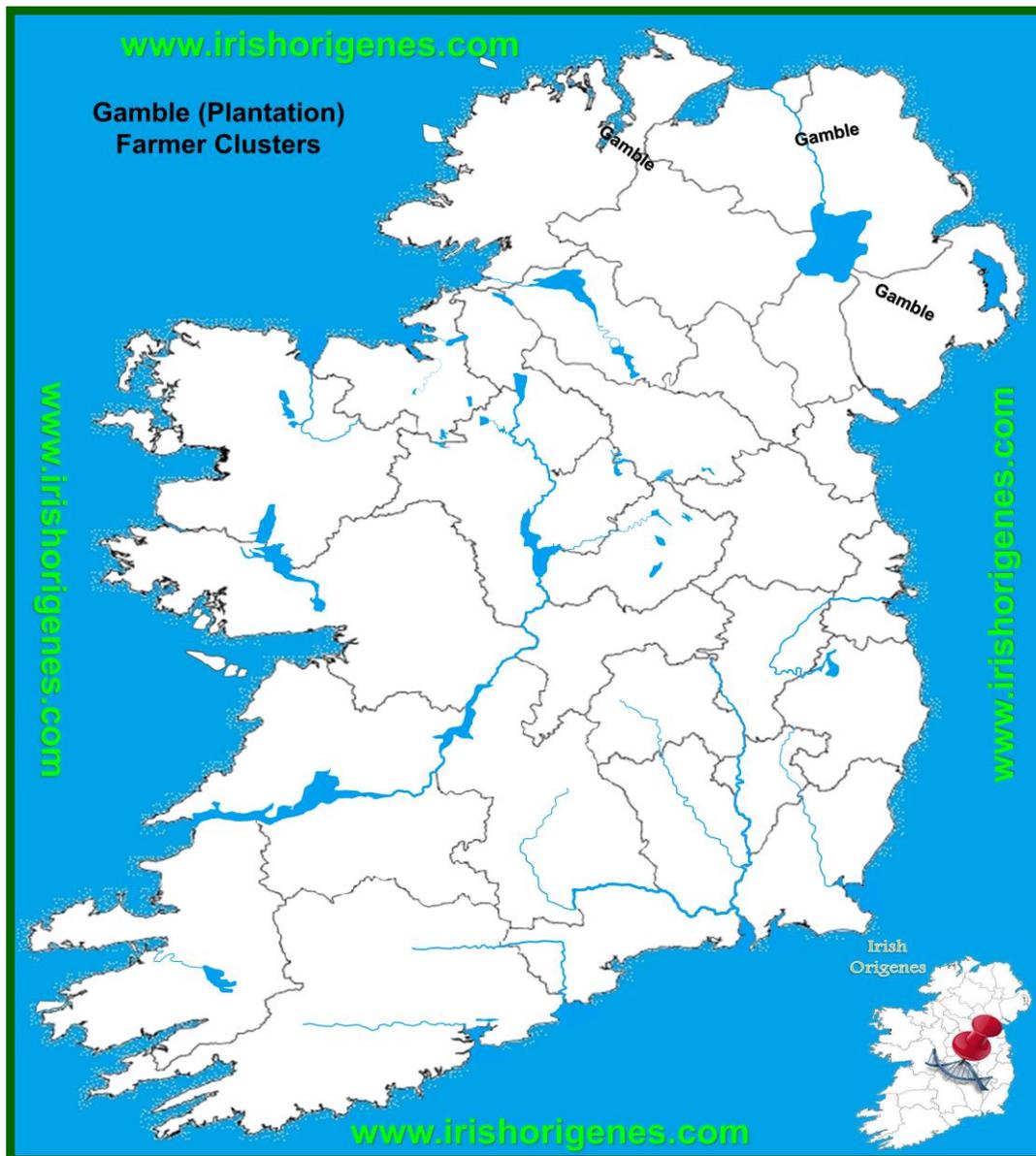


Figure 6: The Gamble farming communities. Census data reveals that individuals with Gaelic Irish, Norman, or Scottish Gallowglass surnames were overwhelmingly Catholic, while those with 16th and 17th Century Plantation Scottish or English surnames were overwhelmingly Protestant. The Gamble surname is associated with 17th Century Plantation settlement. Distribution mapping of farmers (Protestant male, heads of household) named Gamble in early census data reveals 3 distinct groups spread throughout Ulster in Northern Ireland. Each surname is positioned as it appears on an Irish Origenes Medieval Surnames of Ireland map, the most common spelling is detailed in each location, free to view: <https://www.origenesmaps.com>

A Paternal Ancestral link with Southwest Scotland

The method of using genetic surname matches as revealed by commercial ancestral Y-DNA testing to pinpoint a paternal ancestral genetic homeland works by exploiting the link between the Y chromosome, surname, and land, which are typically passed from father to son through the generations. In the absence of a link to the land the process becomes more challenging. The link with the land is greatest among the farming community, and since farmers can still be found farming the land where their ancestor lived when he first inherited his surname, or where one's ancestor first settled, one can plot where farmers with the surnames that appear in one's Y-

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DNA results originate and identify an area common to most if not all. This means that upon Y-DNA testing a male named 'Gamble' from Argyllshire will be a Y-DNA genetic match to males named MacMillan, MacAlister, and MacEachern, surnames associated with the Isle of Arran and its borderlands. In contrast, a 'Gamble' male from Wigtownshire will be a Y-DNA genetic match to individuals with surnames associated with Southwest Scotland.

Commercial ancestral Y-DNA testing revealed that the Scottish Clark, Wright, Alexander, McDowell, and McKee surnames dominates among the test subject's closest recurring Y-DNA SNP matches, see **Figure 4**. The Y-DNA results reveal that the test subject's paternal ancestor lived among a group of related Scottish males among whom appeared the Clark, Wright, Alexander, McDowell, and McKee surnames. Distribution mapping of Scottish farmers named Clark, Wright, Alexander, McDowell, and McKee reveals that they only occur together within Southwest Scotland in an area where the test subject's R-M222 paternal genetic marker predominates in the local population, see **Figure 7**. An examination of the surnames associated with Galloway in Southwest Scotland reveals many that appear among the test subject's closest and most frequent Y-DNA genetic relatives, see **Figures 2, 4, and 8**. Strikingly, these Y-DNA linked surnames surround the 'Campbells' of Wigtownshire, see **Figure 8**. The 'Campbell' surname also appears as a close recurring Y-DNA STR match (**black arrow, figure 2**), and is similar to the Gamble surname, and could have easily have been corrupted to Gamble upon arrival in Ireland. The test subject's Y-DNA test results reveal that his paternal ancestor was originally named 'Campbell' and lived in Wigtownshire in the far southwest of Scotland .

'Gambell' Y-DNA Case Study

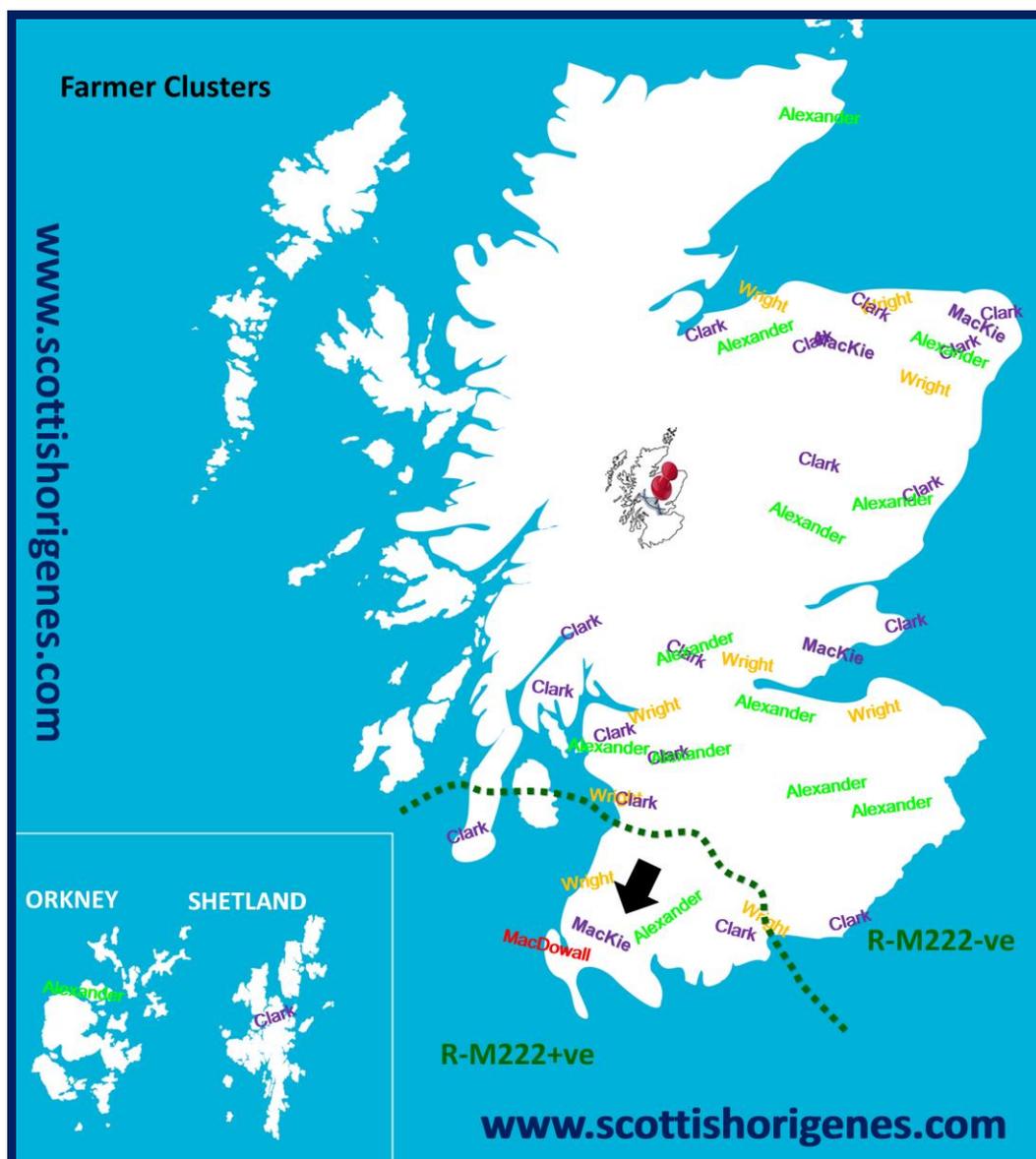


Figure 7: Overlay mapping reveals a paternal ancestral origin within Southwest Scotland. Y-DNA testing reveals that the Clark, Wright, Alexander, McDowell, and McKee surnames arose among related males living in a specific Scottish location. Distribution mapping of Scottish farmers named Clark, Wright, Alexander, McDowell, and McKee reveals that they only occur together within Southwest Scotland (**black arrow**) in an area where the test subject's R-M222 paternal genetic marker predominates in the local population. Each surname is positioned in the location where farmers with each surname concentrated in early census data. The most common spelling is detailed in each location. Surnames are positioned as they appear on the Scottish Origenes Surnames map, free to view online <https://www.origenesmaps.com>

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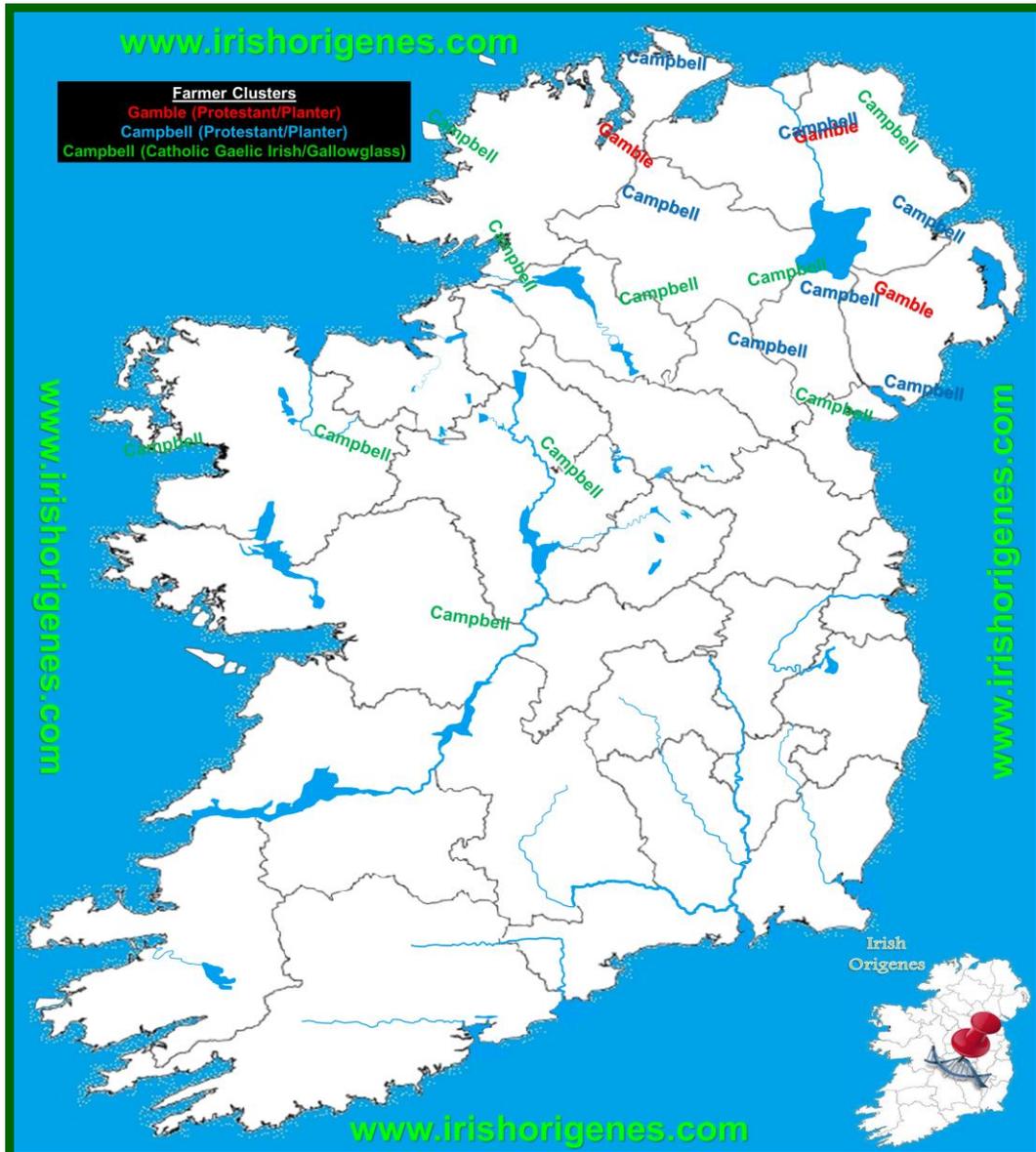


Figure 11: The Irish Campbell and Gambell farming communities. Census data reveals that individuals with Gaelic Irish, Norman, or Scottish Gallowglass surnames were overwhelmingly Catholic, while those with 16th and 17th Century Plantation Scottish or English surnames were overwhelmingly Protestant. The Campbell surname can be of Gaelic Irish, Scottish mercenary Gallowglass and Plantation Scottish origin. Distribution mapping reveals that the various Campbell and Gambell communities are found together in 3 locations, which indicates that the test subject's Wigtownshire Plantation Scots Campbells have deliberately altered their surname to distinguish themselves from other Campbells. Each surname is positioned as it appears on an Irish Origenes Surname Maps, the most common spelling is detailed in each location, free to view: <https://www.origenesmaps.com>

Irish Gaels

Research based on the hundreds of Y-DNA Case Studies conducted at Scottish Origenes has resulted in a Y-DNA map of Scotland, see **Figure 12**. That map reveals that the modern Scots are a diverse bunch descended from Neolithic farmers, Celts (Ancient Britons, Picts, Scots and Irish Gaels), Romans, Anglo-Saxons, Vikings, and Normans. Clues to the ethnic origin of the test subject's paternal ancestors can be found in his Irish R-M222 genetic marker and the Irish surnames that appear among his Y-DNA results, see **Figures 2 and 4**.

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The Irish R-M222 Y-DNA paternal genetic marker first appeared in a single male who lived in the far northwest of Ireland approximately 1,800 years ago. This marker reveals that Mr. Gamble's paternal ancestors lived near, or on, the Inishowen peninsula in the far northwest of Ireland until around 900 years ago. Commercial ancestral Y-DNA testing and extensive Y-DNA Case Studies at Irish and Scottish Origenes have revealed areas beyond Inishowen shores where R-M222^{+ve} males predominate in the local population, particularly along Ireland's west coast (Moy River valley in Mayo), Southern Ulster, Galway, and Galloway (Southwest Scotland). Clues as to why some of these R-M222^{+ve} Gaels left Inishowen and began colonising throughout Ireland and Scotland can be found in their origin; Donegal (*Dún na nGall* 'base or fort of the Foreigner') and their descriptive surnames which they took with them like Gallagher (*Ó Gallchobhair* meaning 'Foreign helper') who upon settling along the west coast of Ireland acquired new surnames like Higgins (*O'hUigin* meaning 'Viking') and Halloran (*O'hAllmhurain* meaning 'Pirate or Stranger from overseas'). Modern DNA science indicates that during the appearance of surnames (800AD onwards) the R-M222^{+ve} Gaels of Inishowen had formed an alliance with Scandinavian 'Vikings,' and that Christian-Gael and Heathen-Gall (*Gall = foreigner*) had together raided and colonised throughout Ireland and beyond. In support of this Viking-Inishowen connection, research at Irish Origenes has uncovered three individuals with recent Inishowen ancestry but with Scandinavian Y-DNA: unmistakable evidence of Scandinavian contact with Inishowen.

'Gambell' Y-DNA Case Study

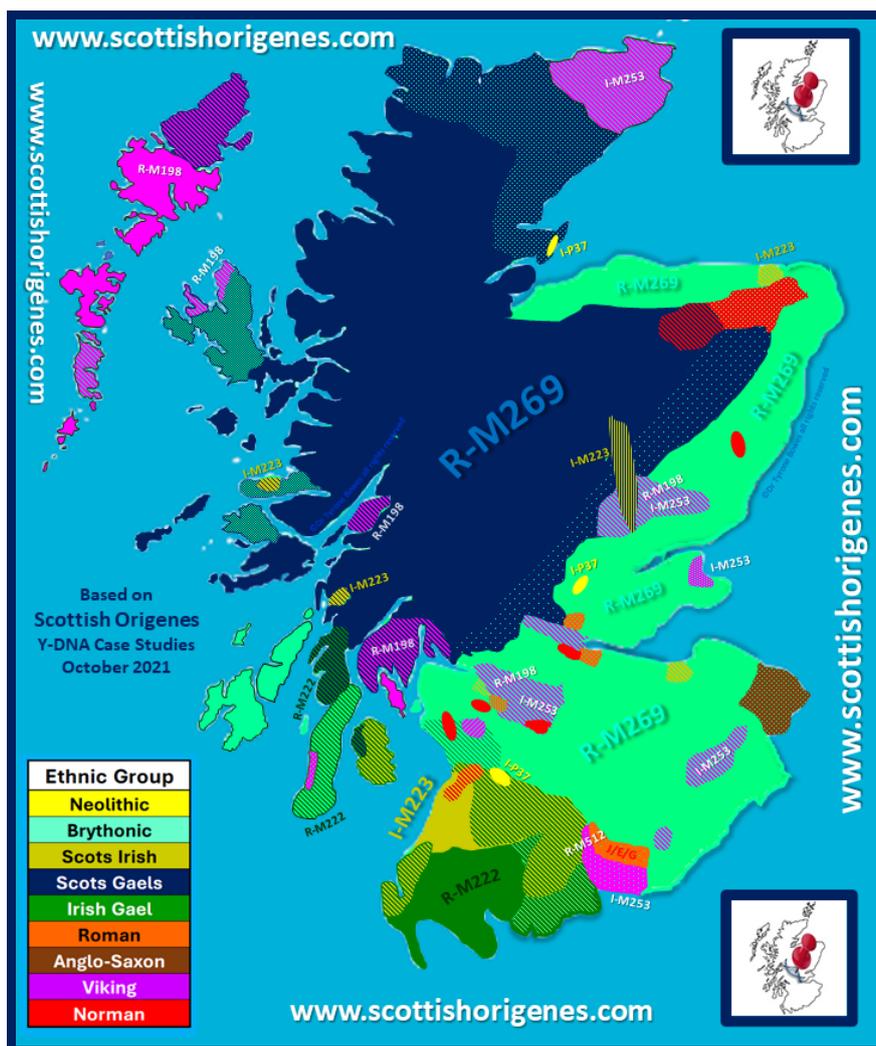


Figure 12: The Scottish Origenes Y-DNA ethnicity map of Scotland. Y-DNA Case Studies at Scottish Origenes reveals an ethnicity map of Scotland. The test subject's Irish paternal ancestor carried the R-M222 genetic marker and arrived in Southwest Scotland in around 1100AD.

R-M222^{ve} males from Inishowen took part in the Hiberno-Norse Conquest and colonisation of Southwest Scotland which was led by the King of Norway 'Magnus Barelegs' in about 1100AD. The land in Southwest Scotland they conquered became 'Galloway' meaning 'land of the foreign Gael;' a term used by the surrounding 'Scots' to describe the Gaels from Inishowen in Northwest Ireland who settled there. The Inishowen Gaels took with them their genetic markers (like R-M222) and their surnames like McGee (McGhie), Kelly, and McLaughlin (MacLachlan). However, in the areas within Southwest Scotland where R-M222^{ve} Irish Gaels settled permanently they and their descendants acquired new surnames like Campbell, MacDowall, and MacLellan.

The Dohertys, McLaughlins and McGees that often feature prominently among R-M222 Y-DNA results reach their highest concentration in, or close to the Inishowen peninsula, see **Figures 2, 4, and 13**. In fact, the territory of the Dohertys, who dominate the genetic matches of R-M222^{ve} males, incorporated much of Inishowen together with the historic centre of 'Grianan of Aileach' where the R-M222 marker reaches its highest concentration in Ireland, see **Figures 2 and 14**. Conquest beyond Inishowen would literally allow one's ancestors to 'make a name for themselves,'

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and what the DNA reveals is an explosion of newly acquired surnames among the Inishowen R-M222⁺ve Gaelic Irish Conquerors of Galloway in Southwest Scotland.



Figure 13: The Surnames of Inishowen in Donegal in Northwest Ireland. The test subject’s paternal ancestor lived in Northwest Ireland prior to his arrival within Southwest Scotland. An examination of Inishowen surnames reveals the Dohertys, McLaughlins, and McGees that dominate the genetic matches of males that carry the R-M222 marker (yellow arrows). Each surname is positioned in the location where farmers with each surname concentrate in early census data. The most common spelling is detailed in each location. Image taken from the Irish Origenes Medieval Surnames of Ireland map, now free to view: www.origenesmaps.com

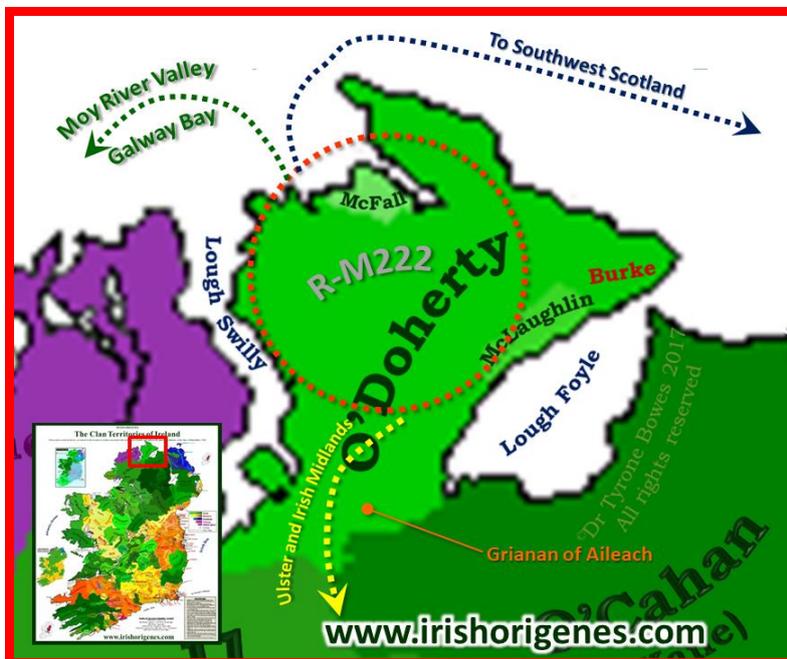


Figure 14: The Clan Territories of Inishowen. An examination of the Irish Clan territories map reveals that the R-M222⁺ve Dohertys and McLaughlins ruled almost the entire Inishowen peninsula. The test subject’s paternal ancestor lived in Northwest Ireland prior to his arrival within Southwest Scotland. The R-M222 ancestral homeland is marked by the historic centre known as ‘Grianan of Aileach.’ Image taken from the Irish Origenes Clan Territories of Ireland map, now free to view: www.origenesmaps.com

FROM GAULISH REFUGEE TO IRISH GAEL

The test subject's Y-DNA results indicate an even earlier paternal link with Central Europe, and that his ancestors were in fact the Celtic people who dominated Central Europe until the Roman Conquest of Gaul in the 1st Century BC. It was Roman Conquest that resulted in his paternal Gaulish ancestors seeking refuge in Britain. However, the Roman Conquest of Britain would push his Gaulish ancestors north into Scotland, and eventually into Ireland, an event that would simultaneously see his ancestors evolve from Continental Gauls to Irish Gaels.

How to confirm the Gamble Paternal Genetic Homelands

- One must keep in mind that this is a scientific DNA approach to identifying an origin. As such, the connection to an identified area(s) can be confirmed by Y-DNA testing males with the surname of interest from the identified location(s).
- The Scottish origin within Wigtownshire can be confirmed by Y-DNA testing males named Campbells from Southwest Scotland.
- The earlier origin within Ireland can be confirmed by Y-DNA testing males named Doherty from Inishowen in Northwest Ireland.

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