Group O: Oriel Subgroups

There are 34 members of Group O: Oriel Subgroups in the BCP. They appear to fall into two unrelated subgroups on the basis of haplotype profiles. Searches conducted through Ysearch and on various Y-DNA genealogical projects resulted in an augmentation of these 34 haplotype profiles with 177 others. The 211 haplotype profiles represent 59 surnames. One of these 211 profiles has been predicted by FTDNA to belong to Haplogroup R1b, two have been predicted to belong to Haplogroup R1b1 and the 33 found only in Ysearch have not been characterized. The remaining 175 haplotype profiles have all been placed in Haplogroup R1b-M269 by test or FTDNA prediction. A pair in each subgroup has been deep-clade tested to the U106/P312 level and all four were placed in Haplogroup R1b-P312. One in one subgroup and two in the other have been further tested to the U152/L21 level and all three belong to Haplogroup R1b-L21.

Subgroup O1: Mixed Oriel Surnames

Subgroup O1: Mixed Oriel Surnames contains nine BCP participants of five surnames.

It was noticed in Jan 09 that five of the BCP participants displayed a null value deviation from the SWAMH plus two other deviant values in the immediately adjacent markers to either side in the FTDNA sequence. With the 9-null-22 triple deviation at Markers 47-49 (DYS511, DYS425 and DYS413a) as a starting point, with 67 markers and all three deviations required, a search was made on Ysearch, with the genetic distance allowed set at six (the maximum permitted). There were only nine hits, all modals. Only one, a preliminary “Irish Null 425” modal, had the 9-null-22 triple deviation.

A modal was then constructed from the BCP haplotype profiles, and this was entered for a Ysearch search, with a genetic distance of six allowed and with all three 9-null-22 deviations required. There were 15 hits. One was the preliminary “Irish Null 425” modal and three others of English origin lacked the full 9-null-22 triple deviation. The remaining 11 were added as an augmentation.

A further search was made with the SWAMH modal value of 12 replacing the null at DYS425. There were ten hits, which were a subset of the 15 hits above.

Comparing these results with the BCP profiles indicated that there were consistent deviations from the SWAMH at another four markers, plus less consistent deviant values at two additional markers, so the criteria were refined. Then another search through Ysearch was done and a fairly extensive search was made of various genealogical Y-DNA projects, with profiles being selected

that displayed the full 9-null-22 triple deviation. It was noticed that most of the names appeared to be Oriel surnames. In Mar 09 Josiah J. McGuire independently noticed that there seemed to be an association of Oriel surnames with the DYS425 null value.[62]

Sometime later the subgroup modal was further refined using the additional haplotype profiles and another search was made through Ysearch. This procedure was repeated several times until the final modal was constructed. Doing a Ysearch search using this modal and allowing a genetic distance of six (the maximum allowed) yielded 25 hits. Three were modals, one being the preliminary "Irish Null 425" modal at a genetic distance (GD) of one, another being a modal identified only as "M" at a GD of four, and the third being the "McKenna Truagh" modal at a GD of six. One haplotype of Irish origin and three of English origin lacked the full 9-null-22 triple deviation. One, a Smith, belongs to the BCP. The others were all included in the augmentation.

The nine BCP haplotype profiles have been augmented as a result by 77 other haplotype profiles: nine from Ysearch[22] who weren't found elsewhere in a particular project, two from the Oriel Septs of Ireland Project[33] (OSIP), twelve from the Carroll Surname Project[34] (CSP), ten from the Clan Donald Project[35] (DCP), two from the O'Donoghue Society Project[30] (O'DSP), ten from the McGuire 1790 USA Project[36] (McG1790), two from the Null 425 Project[37] (N425P), three from the Biggins DNA Project[38] (BSP), two from the Kelly Surname Project[39] (KSP), seven from the McKenna Surname Project[40] (McKSP), one from Kerchner's R1b and Subclades YDNA Haplogroup Project[41] (KR1bP), two from the McMahon Surname Project[42] (McMSP), one from the Smith-Worldwide Surname Project[43] (S-WWSP), one from the Smith-Northeast Surname Project[44] (S-NESP), one from the Walker Surname Project[45] (WSP) and twelve from the Calkins Family Project (CFP). The nine in the BCP are made up of two Boylans, one Carroll, four Clarkes, the O'Reilly and one Smith.

The haplotype profiles in this subgroup total 86, representing 21 surnames. The two Boylans from the BCP have tested just to the 37-marker level but all of the rest have tested to the 67-marker level.

Of those of this cluster in the BCP, none have had a deep clade test. Of the others in this cluster eight have had a deep clade test, with the results placing one in Haplogroup R1b-P25, four downstream of that in Haplogroup R1b-M269, one further downstream in Haplogroup R1b-P312 and two again further downstream in Haplogroup L21. The profiles from Ysearch have not been characterized as to haplogroup because the Ysearch haplogroup info is too erratic. All the others, whether or not in the BCP, have been projected by FTDNA to belong to Haplogroup R1b-M269.

The names and origins of the members of this subgroup are shown in Charts 55, 56, 57, 58 and 59 below.

		Breifne Clans Project	Family Residential ID			Family Origins in Ireland					
Databse		Subgroup O1:	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County	
Code or Kit	BCP Code	**Mixed Oriel Surnames**									
	Gbn-O1a	**Smith**									
122652	V-S	Vincent Smyth	not given	not given	–	not given	–	not given	not given	not given	
119122	TJS	desc. James Smith	–	Down	~1790	unknown	~1790	unknown	unknown	Down	
74097	dx-S	desc. x Smith	not given	not given	–	not given	–	not given	not given	not given	
83132	dJm-S	desc. James Smith	Seneca Falls	New York	≤1860	unknown	~1810	unknown	unknown	unknown	
	Clg-O1a	**Kelly**									
73887	MGK	Michael G. Kelly	–	Armagh	≤1811	unknown	≤1811	unknown	unknown	Armagh	
107942	JEK	James E. Kelly	–	Monaghan	–	unknown	–	unknown	unknown	Armagh	
	Bgl-O1a	**Boylan**									
46952	MWB	Michael William Boylen	Boston	Massachusetts	1840s	unknown	~1810	unknown	unknown	Cavan?	
65227	JFB	John Francis Boylan	Portage	Wisconsin	1850s	Dungummin?	≤1832	Kilbride	Clanmahon	Cavan	
	Crb-O1a	**Carroll**									
91949	dE-C	desc. Elisha Carroll	–	North Carolina	1799	unknown	<1799	unknown	unknown	unknown	
N41845	J-C	James Carroll	–	North Carolina	1799	unknown	<1799	unknown	unknown	unknown	
102450	dE-C	desc. Elisha Carroll	–	North Carolina	1799	unknown	<1799	unknown	unknown	unknown	
107119	dE-C	desc. Elisha Carroll	–	North Carolina	1799	unknown	<1799	unknown	unknown	unknown	
116894	dE-C	desc. Elisha Carroll	–	North Carolina	1799	unknown	<1799	unknown	unknown	unknown	
101232	dWBC	desc. William B. Carroll	–	North Carolina	1799	unknown	<1799	unknown	unknown	unknown	
105523	dE-C	desc. Elisha Carroll	–	North Carolina	1799	unknown	<1799	unknown	unknown	unknown	
30624	dJe-C	desc. Jesse Carroll	–	South Carolina	≤1850	unknown	<1850	unknown	unknown	unknown	
32061	dA-C	desc. Alexander Carroll	Samson<DuplinCo.	North Carolina	≤1783	unknown	<1783	unknown	unknown	unknown	
105592	dx-C	desc. x Carroll	not given	not given	–	not given	–	not given	not given	not given	
	Egn-O1a	**Heaney**									
N49738	dR-H	desc. Robert Heaney	–	New York	≤1858	unknown	<1858	unknown	unknown	unknown	

Chart 55
Subgroup O1
Mixed Oriel Surnames, Part 1
Names & Origins

		Breifne Clans Project	Family Residential ID			Family Origins in Ireland				
Databse		Subgroup O1:	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County
Code or Kit	BCP Code	**Mixed Oriel Surnames** Part 2								
	Ctl-O1a	**Callan**								
74679	dP-C	desc. Peter Collins/Callan	not given	not given	–	unknown	~1800	unknown	unknown	Meath?
	Adg-O1a	**Higgins**								
KQYQS	dJ-H	desc. Joseph Higgins	not given	not given	–	unknown	≤1765	unknown	unknown	unknown
	Aml-O1a	**McAulay**								
6FY3R	dJ-McA	desc. James McAulay	Londonderry	Derry	~1800	Londonderry	≤1800	Clondermot	Tirkeeran	Derry
7ZEF9	dJ-McA	desc. James McAulay	Londonderry	Derry	~1800	Londonderry	≤1800	Clondermot	Tirkeeran	Derry
	Dmn-O1a	**McDonald**								
DG8CK	S-McD	Scott. McDonald	–	Tennessee?	<1824	unknown	≤1824	unknown	unknown	unknown
&29BYY	RDMcD	R.D. McDonald	not given	not given	–	not given	–	not given	not given	not given
&XEAUQ	JEMcD	James E. McDaniel	Jefferson Co.	Alabama	≤1833	unknown	<1833	unknown	unknown	unknown
&NHHMM	F-McD	F. McDonald	not given	not given	–	not given	–	not given	not given	not given
&DRPCR	MLMcD	Michael L. McDaniel	not given	not given	–	not given	≤1795	not given	not given	not given
&AWQ41	HEMcD	H.E. McDonald Sr.	Brandywine Creek	Delaware	<1700	unknown	≤1645	unknown	unknown	unknown
	Dmn-O1b	**McDonald**								
8Z984	PRMcD	P.R. McDaniel	Barnwell Co.	South Carolina	~1775	unknown	≤1775	unknown	Barnwell	S. Carolina
&RMOXW	JIMcD	J.I. McDaniel	Orangeburg Dist.	South Carolina	~1795	unknown	≤1795	unknown	unknown	unknown
&DIOSM	JMMcD	J.M. McDonald	not given	not given	–	not given	–	not given	not given	not given
ZAEUF	dG-McD	desc. George McDonald	Montezuma	Indiana	~1825	unknown	≤1825	unknown	unknown	unknown
&OMPW5	CTMcD	C.T. McDonald	not given	not given	–	not given	–	not given	not given	not given
&71UWX	LEMcD	Lenard E. McDonald	not given	not given	–	not given	<1822	not given	not given	not given
	Hrn-O1a	**Herrington**								
DJS8A	dJ-H	desc. James Herrington	not given	not given	–	unknown	≤1801	unknown	unknown	England

Chart 56
Subgroup O1
Mixed Oriel Surnames, Part 2
Names & Origins

		Breifne Clans Project	Family Residential ID			Family Origins in Ireland				
Databse		Subgroup O1:	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County
Code or	BCP	**Mixed Oriel Surnames**								
Kit	Code	Part 3								
	Wlk-O1a	**Walker**								
112086	dJ-W	desc. James Walker	Bath?	England	~1887	unknown	–	unknown	unknown	unknown
	Ptx-O1a	**Pate**								
44RR8	dL-P	desc. Levi Pate	not given	not given	~1790	unknown	–	unknown	unknown	unknown
VYP6U	dL-P	desc. Levi Pate	not given	not given	~1790	unknown	–	unknown	unknown	unknown
	Dnc-O1a	**Dunphy**								
104452	KFD	Kurtis Frederick Dunphy	Boston	Massachusetts	≤1835	unknown	≤1835	unknown	unknown	unknown
97145	E-O'D	Eóin Ó Donnchadha	not given	not given	–	not given	–	not given	not given	not given
	Mtg-O1a	**McMahon**								
13852	dW-McM	desc.William McMachen	Winchester	Virginia	≤1749	unknown	<1749	unknown	unknown	unknown
69356	dx-McM	desc. x McMahon	not given	not given	–	not given	–	not given	not given	not given
[McMahon]	Mtw-O1a	**Matthews**								
52246	dx-M	desc. x Matthews	not given	not given	–	not given	–	not given	not given	not given
	Clr-O1a	**Clarke**								
123611	EPC	Edward Patrick Clarke	Ballymaginaghy	Down	≤1840	Ballymaginagh	≤1840	Drumgooland	Iveagh Upr.	Down
130308	PJC2	Patrick Joseph Clarke	Ballymaginaghy	Down	≤1840	Ballymaginagh	≤1840	Drumgooland	Iveagh Upr.	Down
RDD6A	T-C	Thomas Clark	Camletter	Fermanagh	≤1792	Camletter	<1792	Kinawley	Knockninny	Fermanagh
117758	JJC	James J. Clarke	not given	not given	–	not given	–	not given	not given	not given
[McGuire]	Bgn-O1a	**Biggins**								
69648	dP-B1	desc. Patrick1 Beggan	Cormeenmore	Cavan	≤1821	Cormeenmore	≤1821	Larah	Tullygarvey	Cavan
127469	dP-B2	desc. Patrick2 Biggins	not given	not given	–	unknown	≤1807	unknown	unknown	Monaghan
146867	dJm-B	desc. James Biggins	Will Co.	Illinois	≤1884	unknown	≤1822	unknown	unknown	Monaghan

Chart 57
Subgroup O1
Mixed Oriel Surnames, Part 3
Names & Origins

		Breifne Clans Project	Family Residential ID			Family Origins in Ireland				
Databse		Subgroup O1:	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County
Code or Kit	BCP Code	Mixed Oriel Surnames Part 4								
	Udr-O1a	**McGuire**								
23171	dJs-McG	desc. Josiah McGuire	–	Virginia	≤1794	unknown	≤1794	unknown	unknown	unknown
146421	dF-McG2	desc. Francis2 McGuire	not given	not given	–	unknown	≤1800	unknown	unknown	unknown
N7273	dE-McG	desc. Elijah McGuire	Franklin Co.	Virginia	≤1791	unknown	≤1791	unknown	unknown	unknown
21218	dF-McG1	desc. Francis1 McGuire	–	Virginia	~1730	unknown	≤1730	unknown	unknown	unknown
33735	dF-McG1	desc. Francis1 McGuire	–	Virginia	~1730	unknown	≤1730	unknown	unknown	unknown
113714	dJm-McG	desc. James McGuire	–	Virginia	1800	unknown	≤1800	unknown	unknown	unknown
111694	dJn-McG1	desc. John1 McGuire	not given	not given	–	not given	–	not given	not given	not given
20871	dJe-McG	desc. Jesse McGuire	–	Virginia	~1785	unknown	≤1785	unknown	unknown	unknown
	Udr-O1b	**McGuire**								
86421	dTm-McG	desc. Timothy McGuire	Lancaster Co.	Pennsylvania	~1740	unknown	≤1740	unknown	unknown	unknown
108908	dJn-McG2	desc. John2 McGuire	not given	not given	–	not given	–	not given	not given	not given
44801	dTJMcG	desc. Thomas J. McGuire	St. Lawrence Co.	New York	≤1830	unknown	≤1830	unknown	unknown	unknown
	Cnt-O1a	**McKenna**								
100576	P-McK2	Patrick2 McKenna	Aghnagha	Monaghan	~1766	Aghnagha	≤1766	Errigal Trough	Trough	Monaghan
64767	J-McK	John McKenna	Aghnagha	Monaghan	~1766	Aghnagha	≤1766	Errigal Trough	Trough	Monaghan
64768	P-McK1	Patrick1 McKenna	Aghnagha	Monaghan	~1766	Aghnagha	≤1766	Errigal Trough	Trough	Monaghan
64771	K-McK	desc. Michael McKenna	Aghnagha	Monaghan	~1766	Aghnagha	≤1766	Errigal Trough	Trough	Monaghan
21156	G1-McK	Gerard McKenna	Aghnagha	Monaghan	~1766	Aghnagha	≤1766	Errigal Trough	Trough	Monaghan
&VA2IV	GFMcK	G.F. McKenna	not given	not given	–	not given	–	not given	not given	not given
67837	RJMcK	Richard J. McKenna	Turner's Marsh	Tasmania	≤1863	Roslea	≤1816	Clones	Clankelly	Fermanagh
65962	Pr-McK	Peter McKenna	Ballarat	Victoria	≤1874	unknown	≤1805	unknown	unknown	Monaghan

Chart 58
Subgroup O1
Mixed Oriel Surnames, Part 4
Names & Origins

		Breifne Clans Project	Family Residential ID			Family Origins in Ireland					
Databse		Subgroup O1:	Address	State/Prov. /County	From	Townland	Year	Civil Parish	Barony	County	
Code or	BCP	Mixed Oriel Surnames									
Kit	Code	Part 5									
	Rgl-O1a	O'Reilly									
121180	COO'R	Ciarán Óg O'Reilly	Swan Lake	Cavan	≤1862	Swan Lake	≤1862			Cavan	
	Ulc-O1a	Calkins									
63104	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
70545	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
104240	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
56933	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
90197	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
102175	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
55805	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
64822	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
69438	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
93002	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
92235	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	
71614	dx-C2	desc. – Calkins	not given	not given	–	not given	–	not given	not given	not given	

Chart 59
Subgroup O1
Mixed Oriel Surnames, Part 5
Names & Origins

Below, in Charts 60, 61, 62, 63 and 64, is the coding for the members of Subgroup O1.

					Line IDs								H	#
				Breifne Clans Project	S	F	S	G	S	L	F	M	a	M
				Subgroup O1:	u	a	u	r	u	i	a	e	p	a
				Mixed Oriel Surnames	r	m	r	o	b	n	m	m	l	r
				Part 1	n	i	c	u	g	e	l	b	o	k
					a	l	o	p	r		l	e	g	e
					m	y	d		o		y	r	r	r
	Ysearch		BCP		e		e		u				p	s
Database	Code	Kit/ID	Code			sr			p		ln			
				Smith Line Gbn-O1a										
BCP	RGGUS	122652	V-S	Vincent Smyth	4	1	Gbn	O	1	a	1	1	R1b-M269*	67
WWSP	KB56Q	119122	TJS	desc. James2 Smith	4		Gbn	O	1	a			R1b-M269*	67
N425P		74097	dx-S	desc. x Smith	4		Gbn	O	1	a			R1b-M269*	67
NESP		83132	dJm-S1	desc. James1 Smith	4		Gbn	O	1	a			R1b-M269*	67
				Kelly Line Clg-O1a										
KSP		73887	MGK	Michael G. Kelly	17		Clg	O	1	a			R1b-M269*	67
KSP	29CQR	107942	JEK	James E. Kelly	17		Clg	O	1	a			R1b-M269*	67
				Boylan Line Bgl-O1a										
BCP	3E8R6	46952	MWB	Michael William Boylen	1	1	Bgl	O	1	a	1	1	R1b-M269*	37
BCP	none	65227	JFB	John Francis Boylan	1	2	Bgl	O	1	a	2	1	R1b-M269*	37
				Carroll Line Crb-O1a										
CSP	WDNKG	91949	dE-C	desc. Elisha Carroll	2		Crb	O	1	a			R1b-M269*	67
CSP	KMKZE	N41845	J-C	James Carroll	2		Crb	O	1	a			R1b-P312*	67
CSP		102450	dE-C	desc. Elisha Carroll	2		Crb	O	1	a			R1b-M269*	67
CSP		107119	dE-C	desc. Elisha Carroll	2		Crb	O	1	a			R1b-M269*	67
CSP		116894	dE-C	desc. Elisha Carroll	2		Crb	O	1	a			R1b-M269*	67
CSP	T64VQ	101232	dWBC	desc. William B. Carroll	2		Crb	O	1	a			R1b-M269*	67
CSP		105523	dE-C	desc. Elisha Carroll	2		Crb	O	1	a			R1b-M269*	67
CSP		30624	dJe-C	desc. Jesse Carroll	2		Crb	O	1	a			R1b-M269*	67
BCP	HRYB8	32061	dA-C	desc. Alexander Carroll	2	1	Crb	O	1	a	1	1	R1b-M269*	67
CSP		105592	dx-C	desc. x Carroll	2		Crb	O	1	a			R1b-M269*	67
				Heaney Line Egn-O1a										
OSIP		N49738	dR-H	desc. Robert Heaney	5		Ecn	O	1	a			R1b-M269*	67

Chart 60
Subgroup O1
Mixed Oriel Surnames, Part 1
Coding

					Line IDs								H	#	
				Breifne Clans Project	S	F	S	G	S	L	F	M	a	M	
				Subgroup O1:	u	a	u	r	u	i	a	e	p	a	
				Mixed Oriel Surnames	r	m	r	o	b	n	m	m	l	r	
				Part 2	n	i	c	u	g	e	l	b	o	k	
					a	l	o	p	r		l	e	g	e	
					m	y	d		o		y	r	r	r	
	Ysearch		BCP		e		e		u				p	s	
Database	Code	Kit/ID	Code			sr			p		ln				
				Callan Line Ctl-O1a											
OSIP	7R5DB	74679	dP-C	desc. Peter Collins/Callan	10		Ctl	O	1	a			R1b-L21*	67	
				Higgins Line Adg-O1a											
Ysearch	KQYQS		dJ-H	desc. Joseph Higgins	18		Adg	O	1	a			–	67	
				McAulay Line Aml-O1a											
Ysearch	6FY3R		dJ-McA	desc. James McAulay	19		Aml	O	1	a			–	67	
Ysearch	7ZEF9		dJ-McA	desc. James McAulay	19		Aml	O	1	a			–	67	
		ClanDonald Codes		**McDonald** Line Dmn-O1a											
Ysearch	DG8CK		S-McD	Scott. McDonald	15		Dmn	O	1	a			–	67	
CDP	none	&29BYY	RDMcD	R.D. McDonald	15		Dmn	O	1	a			R1b-M269*	67	
CDP	3YZ7E	&XEAUQ	JEMcD	James E. McDaniel	15		Dmn	O	1	a			R1b-M269*	67	
CDP	X8TWS	&NHHMM	F-McD	F. McDonald	15		Dmn	O	1	a			R1b-M269*	67	
CDP	G63RV	&DRPCR	MLMcD	Michael L. McDaniel	15		Dmn	O	1	a			R1b-M269*	67	
CDP	none	&AWQ41	HEMcD	H.E. McDonald Sr.	15		Dmn	O	1	a			R1b-M269*	67	
		ClanDonald Codes		**McDonald** Line Dmn-O1b											
Ysearch	8Z984		PRMcD	P.R. McDaniel	15		Dmn	O	1	b			–	67	
CDP	22YQK	&RMOXW	JIMcD	J.I. McDaniel	15		Dmn	O	1	b			R1b-M269*	67	
CDP	none	&DIOSM	JMMcD	J.M. McDonald	15		Dmn	O	1	b			R1b-M269*	67	
Ysearch	ZAEUF		dG-McD	desc. George McDonald	15		Dmn	O	1	b			–	67	
CDP	none	&OMPW5	CTMcD	C.T. McDonald	15		Dmn	O	1	b			R1b-M269*	67	
CDP	8AQAN	&71UWX	LEMcD	Lenard E. McDonald	15		Dmn	O	1	b			R1b-M269*	67	
				Herrington Line Hrn-O1a											
Ysearch	DJS8A		dJ-H	desc. James Herrington	16		Hrn	O	1	a			–	67	

Chart 61
Subgroup O1
Mixed Oriel Surnames, Part 2
Coding

					Line IDs								H	#
				Breifne Clans Project	S	F	S	G	S	L	F	M	a	M
				Subgroup O1:	u	a	u	r	u	i	a	e	p	a
				Mixed Oriel Surnames	r	m	r	o	b	n	m	m	l	r
				Part 3	n	i	c	u	g	e	l	b	o	k
					a	l	o	p	r		l	e	g	e
					m	y	d		o		y	r	r	r
	Ysearch		BCP		e		e		u				p	s
Database	Code	Kit/ID	Code			sr			p		ln			
				Walker Line Wlk-O1a										
WSP	QAEVG	112086	dJ-W	desc. James Walker	14		Wlk	O	1	a			R1b-M269*	67
				Pate Line Ptx-O1a										
Ysearch	44RR8		dL-P	desc. Levi Pate	21		Pt1	O	1	a			–	67
Ysearch	VYP6U		dL-P	desc. Levi Pate	21		Pt1	O	1	a			–	67
				Dunphy Line Dnc-O1a										
O'DSP	QVWDN	104452	KFD	Kurtis Frederick Dunphy	13		Dnc	O	1	a			R1b-M269*	67
O'DSP		97145	E-O'D	Eóin Ó Donnchadha	13		Dnc	O	1	a			R1b-M269*	67
				McMahon Line Mtg-O1a										
KR1bP		13852	dW-McM	desc.William McMachen	6		Mtg	O	1	a			R1b-P25*	67
McMSP		69356	dx-McM	desc. x McMahon	6		Mtg	O	1	a			R1b-M269*	67
				Matthews Line Mtw-O1a										
McMSP		52246	dx-M	desc. x Matthews	20		Mtw	O	1	a			R1b-M269*	67
				Clarke Line Clr-O1a										
BCP	none	123611	EPC	Edward Patrick Clarke	3	1	Clr	O	1	a	1	1	R1b-M269*	67
BCP	none	130308	PJC2	Patrick Joseph Clarke	3	1	Clr	O	1	a	1	2	R1b-M269*	67
BCP	RDD6A	117759	TRC	Thomas R. Clark	3	2	Clr	O	1	a	2	2	R1b-M269*	67
BCP	none	117758	JJC	James J. Clarke	3	2	Clr	O	1	a	2	1	R1b-M269*	67
				Biggins Line Cnt-O1a										
BSP		69648	dP-B1	desc. Patrick1 Beggan	9		Bgn	O	1	b			R1b-M269*	67
BSP	75XZ3	127469	dP-B2	desc. Patrick2 Biggins	9		Bgn	O	1	b			R1b-M269*	67
BSP		146867	dJm-B	desc. James Biggins	9		Bgn	O	1	b			R1b-M269*	67

Chart 62
Subgroup O1
Mixed Oriel Surnames, Part 3
Coding

					Line IDs								H	#	
				Breifne Clans Project	S	F	S	G	S	L	F	M	a	M	
				Subgroup O1:	u	a	u	r	u	i	a	e	p	a	
				Mixed Oriel Surnames	r	m	r	o	b	n	m	m	l	r	
				Part 4	n	i	c	u	g	e	l	b	o	k	
					a	l	o	p	r		l	e	g	e	
					m	y	d		o		y	r	r	r	
	Ysearch		BCP		e		e		u				p	s	
Database	Code	Kit/ID	Code			sr			p		ln				
				McGuire Line Udr-O1a											
McG1790		23171	dJs-McG	desc. Josiah McGuire	8		Udr	O	1	a			R1b-M269*	67	
McG1790		146421	dF-McG2	desc. Francis2 McGuire	8		Udr	O	1	a			R1b-M269*	67	
McG1790		N7273	dE-McG	desc. Elijah McGuire	8		Udr	O	1	a			R1b-M269*	67	
McG1790		21218	dF-McG1	desc. Francis1 McGuire	8		Udr	O	1	a			R1b-M269*	67	
KNull425P		33735	dF-McG1	desc. Francis1 McGuire	8		Udr	O	1	a			R1b-M269*	67	
McG1790		113714	dJm-McG	desc. James McGuire	8		Udr	O	1	a			R1b-M269*	67	
McG1790		111694	dJn-McG	desc. John McGuire	8		Udr	O	1	a			R1b-M269*	67	
McG1790		20871	dJe-McG	desc. Jesse McGuire	8		Udr	O	1	a			R1b-M269*	67	
				McGuire Line Udr-O1b											
McG1790	KMK29	86421	dTm-McG	desc. Timothy McGuire	8		Udr	O	1	b			R1b-M269*	67	
McG1790		108908	dJn-McG2	desc. John2 McGuire	8		Udr	O	1	b			R1b-M269*	67	
McG1790		44801	dTJMcG	desc. Thomas J. McGuire	8		Udr	O	1	b			R1b-M269*	67	
				McKenna Line Bgn-O1a											
McKSP	3NPX3	100576	P-McK2	Patrick2 McKenna	7		Cnt	O	1	a			R1b-M269*	67	
McKSP	4WVKD	64767	J-McK	John McKenna	7		Cnt	O	1	a			R1b-M269*	67	
McKSP	NJBVE	64768	P-McK1	Patrick1 McKenna	7		Cnt	O	1	a			R1b-M269*	67	
McKSP	none	64771	K-McK	desc. Michael McKenna	7		Cnt	O	1	a			R1b-M269*	67	
McKSP	KT3BH	21156	G1-McK	Gerard McKenna	7		Cnt	O	1	a			R1b-M269*	67	
CDP	4D78E	&VA2IV	GFMcK	G.F. McKenna	7		Cnt	O	1	a			R1b-M269*	67	
McKSP	YUJDX	67837	RJMcK	Richard J. McKenna	7		Cnt	O	1	a			R1b-M269*	67	
McKSP	4YKSZ	65962	Pr-McK	Peter McKenna	7		Cnt	O	1	a			R1b-M269*	67	

Chart 63
Subgroup O1
Mixed Oriel Surnames, Part 4
Coding

					Line IDs								H	#	
				Breifne Clans Project	S	F	S	G	S	L	F	M	a	M	
				Subgroup O1:	u	a	u	r	u	i	a	e	p	a	
				Mixed Oriel Surnames	r	m	r	o	b	n	m	m	l	r	
				Part 5	n	i	c	u	g	e	l	b	o	k	
					a	l	o	p	r		l	e	g	e	
					m	y	d		o		y	r	r	r	
	Ysearch		BCP		e		e		u				p	s	
Database	Code	Kit/ID	Code			sr			p		ln				
				O'Reilly Line Rgl-O1a											
BCP	none	121180	COO'R	Ciarán Óg O'Reilly	11	1	Rgl	O	1	a	1	1	R1b-M269*	67	
				Calkins Line Ulc-O1a											
CFP	–	63104	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	70545	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	104240	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	56933	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-L21*	67	
CFP	–	90197	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	102175	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	55805	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	64822	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	69438	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	93002	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	92235	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	
CFP	–	71614	dx-C2	desc. – Calkins	38		Ulc	O	1	a			R1b-M269*	67	

Chart 64
Subgroup O1
Mixed Oriel Surnames, Part 5
Coding

The results for the members of Subgroup O1 may be viewed below in Charts 65 – 76. Parts a (Markers 1-37) will be followed by Parts b (Markers 38-67).

				Marker Code																																					
Breifne Clans Project		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	4	G	Y	Y	4	6	5	5	C	C	4	4
Subgroup O1:		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
Mixed Oriel Surnames		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
Part 1a				or		a	b				i		ii		a	b							a	b	c	d		A											
Project				3																									I	I					a	b			
Code or	BCP			9																								H	I	I									
Kit/ID	Code			4																								4	a	b									
	FTDNA>	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 Haplotype																																								
Super W Atlantic	SWAMH	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
Gbn-O1a	Smith						15			13												28																	
122652	V-S	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	15	15	18	15	35	38	12	12
119122	TJS	13	24	14	11	11	15	12	12	13	13	13	29	18	9	10	11	11	25	15	19	28	15	15	16	17	11	11	19	23	17	15	18	16	35	38	12	12
74097	dx-S	13	24	14	11	10	15	12	12	12	13	13	29	16	9	9	11	11	25	15	19	29	15	15	17	17	11	11	19	23	15	15	18	19	37	38	11	12
83132	dJm-S1	13	24	14	11	11	15	12	12	14	13	13	29	17	9	9	11	11	25	15	19	28	15	15	15	15	11	11	19	23	16	15	18	19	37	37	12	12
	Smith																																						
Line Modal	Gbn-O1aMH	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	15	15	18	19	37	38	12	12
Clg-O1a	Kelly																																						
73887	MGK	13	24	14	11	11	15	12	12	15	13	13	29	18	9	10	11	11	25	15	19	27	15	15	16	17	11	11	19	19	15	15	18	19	36	37	12	12
107942	JEK	13	24	14	11	11	16	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	15	15	18	20	36	38	12	12
Bgl-O1a	Boylan																																						
46952	MWB	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
65227	JFB	13	24	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	18	36	37	12	12
Crb-O1a	Carroll																																						
91949	dE-C	13	24	14	11	11	15	12	12	12	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	17	18	37	38	12	12
N41845	J-C	13	24	14	11	11	15	12	12	12	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	17	18	37	38	12	12
102450	dE-C	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	10	11	19	23	16	15	17	18	36	38	12	12
107119	dE-C	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	10	11	19	23	16	15	17	18	37	38	12	12
116894	dE-C	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	16	18	37	38	12	12
101232	dWBC	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	17	17	37	38	12	12
105523	dE-C	13	24	14	12	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	17	18	37	38	12	12
	Carroll																																						
Family Modal	Crb-O1aFMH	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	17	18	37	38	12	12

Chart 65
Subgroup O1
Mixed Oriel Surnames, Part 1a
Results

		Marker Code																													
Breifne Clans Project		5	5	3	3	5	5	6	4	4	5	4	4	4	5	5	4	4	5	4	4	4	5	4	6	5	4	5	6	4	5
Subgroup O1:		3	7	9	9	9	3	4	7	0	1	2	1	1	5	9	3	9	3	5	4	8	2	4	1	6	8	7	4	9	6
Mixed Oriel Surnames		1	8	5	5	0	7	1	2	6	1	5	3	3	7	4	6	0	4	0	4	1	0	6	7	8	7	2	0	2	5
Part 1b				S	S					S			a	b																	
Project				1	1					1																					
Code or	BCP			a	b																										
Kit/ID	Code																														
	FTDNA>	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67
Modal Haplotype																															
Super W Atlantic	SWAMH	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
Gbn-O1a	Smith																														
122652	V-S	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
119122	TJS	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
74097	dx-S	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	14	16	8	12	22	20	13	12	11	13	11	11	12	12
83132	dJm-S1	11	9	15	16	8	10	10	8	10	9	0**	22	23	17	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
	Smith																														
Line Modal	Gbn-O1aMH	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
Clg-O1a	Kelly																														
73887	MGK	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	13	22	20	13	12	11	13	11	11	12	12
107942	JEK	11	9	15	16	8	10	11	8	10	9	0**	22	23	16	10	12	12	16	8	13	22	20	13	12	11	13	11	11	12	12
Bgl-O1a	Boylan																														
46952	MWB																														
65227	JFB																														
Crb-O1a	Carroll																														
91949	dE-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
N41845	J-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
102450	dE-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
107119	dE-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
116894	dE-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
101232	dWBC	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
105523	dE-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
	Carroll																														
Family Modal	Crb-O1aFMH	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12

Chart 66
Subgroup O1
Mixed Oriel Surnames, Part 1b
Results

		Marker Code																																				
Breifne Clans Project		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	4	G	Y	Y	4	6	5	5	C	C	4	4
Subgroup O1:		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
Mixed Oriel Surnames		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
Part 2a				or		a	b				i		ii		a	b							a	b	c	d		A										
Project				3																									I	I					a	b		
Code or	BCP			9																								H	I	I								
Kit/ID	Code			4																								4	a	b								
	FTDNA>	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 Haplotype																																						
Super W Atlantic	SWAMH	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
(cont.)	Carroll						15			13												28				18								18					
30624	dJe-C	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	17	18	37	37	12	12
32061	dA-C	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	17	18	37	37	12	12
105592	dx-C	14	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	18	18	37	38	12	12
	Carroll																																					
Line Modal	Crb-O1aMH	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	18	11	11	19	23	16	15	17	18	37	38	12	12
Mtg-O1a	McMahon																																					
13852	dW-McM	13	24	14	11	11	15	12	12	13	13	13	29	16	9	10	11	11	26	15	19	28	15	15	17	17	11	11	19	19	16	15	18	21	36	37	12	12
69356	dx-McM	13	24	14	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	20	28	15	15	15	17	11	11	19	23	16	15	19	19	36	37	12	12
Mtw-O1a	Matthews																																					
52246	dx-M	13	24	14	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	28	15	15	15	17	11	11	19	23	16	15	18	19	36	37	12	12
	McMahon																																					
Line Modal	Mtg-O1aMH	13	24	14	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	28	15	15	15	17	11	11	19	23	16	15	18	19	36	37	12	12
Egn-O1a	Heaney																																					
N49738	dR-H	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	15	15	18	18	37	37	12	12
Ctl-O1a	Callan																																					
74679	dP-C	13	24	14	11	11	15	12	12	14	13	13	29	17	9	9	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	18	36	36	12	12
Adg-O1a	Higgins																																					
KQYQS	dJ-H	13	24	14	10	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	28	15	15	15	17	11	11	19	23	16	15	18	19	36	37	12	12
Aml-O1a	McAulay																																					
6FY3R	dJ-McA	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	14	14	15	17	11	11	19	23	16	15	18	19	36	37	12	12
7ZEF9	dJ-McA	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	14	14	15	17	11	11	19	23	16	15	18	19	36	37	12	12

Chart 67
Subgroup O1
Mixed Oriel Surnames, Part 2a
Results

		Marker Code																													
Breifne Clans Project		5	5	3	3	5	5	6	4	4	5	4	4	4	5	5	4	4	5	4	4	4	5	4	6	5	4	5	6	4	5
Subgroup O1:		3	7	9	9	9	3	4	7	0	1	2	1	1	5	9	3	9	3	5	4	8	2	4	1	6	8	7	4	9	6
Mixed Oriel Surnames		1	8	5	5	0	7	1	2	6	1	5	3	3	7	4	6	0	4	0	4	1	0	6	7	8	7	2	0	2	5
Part 2b				S	S					S			a	b																	
Project				1	1					1																					
Code or	BCP			a	b																										
Kit/ID	Code																														
	FTDNA>	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67
Modal Haplotype																															
Super W Atlantic	SWAMH	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
(cont.)	Carroll																														
30624	dJe-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
32061	dA-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	23	21	13	12	11	13	11	11	12	12
105592	dx-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	13	22	21	13	12	11	13	11	11	12	12
	Carroll																														
Line Modal	Crb-O1aMH	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
Mtg-O1a	McMahon																														
13852	dW-McM	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	21	13	12	11	13	11	11	12	12
69356	dx-McM	11	9	15	16	8	10	10	8	10	9	0**	22	23	17	10	12	12	16	8	12	22	20	13	12	11	13	12	11	12	12
Mtw-O1a	Matthews																														
52246	dx-M	11	9	15	16	8	10	10	8	10	9	0**	22	23	17	10	12	12	15	8	12	22	20	13	12	11	13	11	11	12	12
	McMahon																														
Line Modal	Mtg-O1aMH	11	9	15	16	8	10	10	8	10	9	0**	23	23	17	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
Egn-O1a	Heaney																														
N49738	dR-H	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
Ctl-O1a	Callan																														
74679	dP-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	17	8	12	22	20	13	12	11	13	11	11	12	12
Adg-O1a	Higgins																														
KQYQS	dJ-H	11	9	15	16	8	10	10	8	10	9	0**	22	23	17	10	12	12	16	8	12	22	20	14	12	11	13	11	11	12	12
Aml-O1a	McAulay																														
6FY3R	dJ-McA	11	9	15	16	8	10	10	8	9	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
7ZEF9	dJ-McA	11	9	15	16	8	10	10	8	9	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12

Chart 68
Subgroup O1
Mixed Oriel Surnames, Part 2b
Results

		Marker Code																																				
Breifne Clans Project		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	4	G	Y	Y	4	6	5	5	C	C	4	4
Subgroup O1:		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
Mixed Oriel Surnames		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
Part 3a				or		a	b				i		ii		a	b							a	b	c	d		A										
Project				3																									I	I					a	b		
Code or	BCP			9																								H	I	I								
Kit/ID	Code			4																								4	a	b								
	FTDNA>	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 Haplotype																																						
Super W Atlantic	SWAMH	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
Dmn-O1a	McDonald																																					
DG8CK	S-McD	13	24	15	11	11	15	12	12	12	13	13	29	18	9	10	11	11	25	14	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	38	12	12
&29BYY	RDMcD	13	24	15	11	11	15	12	12	12	13	13	29	18	9	10	11	11	25	14	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	38	12	12
&XEAUQ	JEMcD	13	24	15	11	11	15	12	12	12	13	13	29	18	9	10	11	11	25	14	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	38	12	12
&NHHMM	F-McD	13	24	15	11	11	16	12	12	12	13	13	29	18	9	10	11	11	25	14	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	38	12	12
&DRPCR	MLMcD	13	24	16	11	11	15	12	12	12	13	13	29	18	9	10	11	11	25	14	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	37	12	12
&AWQ41	HEMcD	13	25	17	11	11	15	12	12	12	13	13	29	18	9	10	11	11	25	14	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	37	12	12
	McDonald																																					
Line Modal	Dmn-O1bMH	13	24	15	11	11	15	12	12	12	13	13	29	18	9	10	11	11	25	14	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	38	12	12
Dmn-O1b	McDonald																																					
8Z984	PRMcD	13	24	14	12	11	15	12	12	13	13	13	29	17	9	10	11	11	24	15	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	38	12	12
&RMOXW	JIMcD	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	24	15	19	28	15	15	16	17	11	11	19	23	16	16	18	19	36	37	12	12
&DIOSM	JMMcD	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	37	12	12
ZAEUF	dG-McD	13	23	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	15	15	18	19	36	37	12	12
&OMPW5	CTMcD	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	29	15	15	16	17	11	11	19	23	16	15	18	18	36	37	12	12
&71UWX	LEMcD	13	24	14	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	27	15	15	17	18	11	11	19	23	15	15	18	21	35	38	12	12
	McDonald																																					
Line Modal	Dmn-O1aMH	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	37	12	12
Hrn-O1a	Herrington																																					
DJS8A	dJ-H	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	15	17	11	11	19	23	16	15	18	18	36	37	12	12
Wlk-O1a	Walker																																					
112086	dJ-W	13	24	14	11	11	15	12	12	12	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	15	15	18	18	36	37	12	12
Ptx-O1a	Pate																																					
44RR8	dL-P	13	24	14	11	11	15	12	12	15	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	10	19	23	16	15	17	18	36	37	12	12
VYP6U	dL-P	13	24	14	11	11	15	12	12	15	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	10	19	23	16	15	17	18	36	37	12	12

Chart 69
Subgroup O1
Mixed Oriel Surnames, Part 3a
Results

		Marker Code																													
Breifne Clans Project		5	5	3	3	5	5	6	4	4	5	4	4	4	5	5	4	4	5	4	4	4	5	4	6	5	4	5	6	4	5
Subgroup O1:		3	7	9	9	9	3	4	7	0	1	2	1	1	5	9	3	9	3	5	4	8	2	4	1	6	8	7	4	9	6
Mixed Oriel Surnames		1	8	5	5	0	7	1	2	6	1	5	3	3	7	4	6	0	4	0	4	1	0	6	7	8	7	2	0	2	5
Part 3b				S	S					S			a	b																	
Project				1	1					1																					
Code or	BCP			a	b																										
Kit/ID	Code																														
	FTDNA>	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67
Modal Haplotype																															
Super W Atlantic	SWAMH	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
Dmn-O1a	McDonald																														
DG8CK	S-McD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	14	12	11	13	11	11	12	12
&29BYY	RDMcD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	14	12	11	13	11	11	12	12
&XEAUQ	JEMcD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	17	8	12	12	20	14	12	11	13	11	11	12	12
&NHHMM	F-McD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	17	8	12	22	20	14	12	11	13	11	11	12	12
&DRPCR	MLMcD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	17	8	12	22	20	14	12	11	13	11	11	12	12
&AWQ41	HEMcD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	14	12	11	13	11	11	12	12
	McDonald																														
Line Modal	Dmn-O1bMH	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	17	8	12	22	20	14	12	11	13	11	11	12	12
Dmn-O1b	McDonald																														
8Z984	PRMcD	11	9	15	16	8	10	10	8	10	9	0**	22	23	15	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
&RMOXW	JIMcD	11	9	15	16	8	10	10	8	10	9	0**	22	22	15	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
&DIOSM	JMMcD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	11	12	12	17	8	12	22	20	13	12	11	13	11	11	12	12
ZAEUF	dG-McD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	17	8	12	22	20	13	12	11	13	11	11	12	12
&OMPW5	CTMcD	11	9	15	16	8	10	10	8	10	9	0**	22	23	15	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
&71UWX	LEMcD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	21	20	13	12	11	13	11	11	12	12
	McDonald																														
Line Modal	Dmn-O1aMH	11	9	15	16	8	10	10	8	10	9	0**	22	23	15	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
Hrn-O1a	Herrington																														
DJS8A	dJ-H	11	9	15	16	8	10	10	8	10	9	0**	22	23	18	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
Wlk-O1a	Walker																														
112086	dJ-W	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
Ptx-O1a	Pate																														
44RR8	dL-P	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
VYP6U	dL-P	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12

Chart 70
Subgroup O1
Mixed Oriel Surnames, Part 3b
Results

		Marker Code																																		
Breifne Clans Project		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 O1:		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
Mixed Oriel Surnames		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
Part 4a				or		a	b				i		ii		a	b							a	b	c	d		A										
Project				3																									I	I					a	b		
Code or	BCP			9																								H	I	I								
Kit/ID	Code			4																								4	a	b								
	FTDNA>	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 Haplotype																																						
Super W Atlantic	SWAMH	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
Dnc-O1a	Dunphy																																					
104452	KFD	13	24	14	11	11	16	12	12	13	13	13	30	17	9	10	11	11	25	15	19	28	15	16	17	17	11	11	19	23	15	15	18	18	37	38	12	12
97145	E-O'D	13	24	14	11	11	15	12	12	12	13	13	29	17	9	10	11	11	26	14	19	28	15	15	16	17	11	11	19	23	16	15	18	18	35	38	11	12
Udr-O1a	McGuire																																					
23171	dJs-McG	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	19	19	37	39	12	10
146421	dFMcG2	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	19	19	37	39	12	10
N7273	dE-McG	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	19	19	37	39	12	10
21218	dF-McG1	13	24	15	11	11	15	12	12	13	13	13	29	17	9	9	11	11	25	15	19	28	15	15	16	17	11	11	19	23	16	15	19	19	37	39	12	10
33735	dF-McG1	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	16	17	11	11	19	23	16	15	19	20	37	38	12	10
113714	dJm-McG	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	19	37	39	12	10
111694	dJn-McG1	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	19	19	36	39	12	10
20871	dJe-McG	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	19	19	37	38	12	10
	McGuire																																					
Line Modal	McGMH2	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	19	19	37	39	12	10
Udr-O1b	McGuire																																					
86421	dTm-McG	14	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	20	18	36	38	12	12
108908	dJn-McG2	14	24	14	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	20	18	36	38	12	12
44801	dTJMcG	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	37	12	12
Bgn-O1a	Biggins																																					
69648	dP-B1	13	24	15	11	11	15	12	12	13	13	13	29	17	9	9	11	11	25	15	19	28	15	15	17	17	12	11	19	23	16	15	17	20	36	37	12	12
127469	dP-B2	13	24	15	11	11	15	12	12	12	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	15	15	17	19	36	38	12	12
146867	dJm-B	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	37	12	12
	Biggins																																					
Line Modal	Bgn-O1aMH	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	17	19	37	37	12	12

Chart 71
Subgroup O1
Mixed Oriel Surnames, Part 4a
Results

		Marker Code																													
Breifne Clans Project		5	5	3	3	5	5	6	4	4	5	4	4	4	5	5	4	4	5	4	4	4	5	4	6	5	4	5	6	4	5
Subgroup O1:		3	7	9	9	9	3	4	7	0	1	2	1	1	5	9	3	9	3	5	4	8	2	4	1	6	8	7	4	9	6
Mixed Oriel Surnames		1	8	5	5	0	7	1	2	6	1	5	3	3	7	4	6	0	4	0	4	1	0	6	7	8	7	2	0	2	5
Part 4b				S	S					S			a	b																	
Project				1	1					1																					
Code or	BCP			a	b																										
Kit/ID	Code					Marker Code																									
	FTDNA>	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67
Modal Haplotype																															
Super W Atlantic	SWAMH	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
Dnc-O1a	Dunphy																														
104452	KFD	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	17	8	12	22	20	13	12	11	13	11	11	12	12
97145	E-O'D	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
Udr-O1a	McGuire																														
23171	dJs-McG	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
146421	dFMcG2	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	15	8	12	23	20	13	12	11	13	11	11	12	12
N7273	dE-McG	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
21218	dF-McG1	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
33735	dF-McG1	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
113714	dJm-McG	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
111694	dJn-McG1	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
20871	dJe-McG	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
	McGuire																														
Line Modal	McGMH2	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	23	20	13	12	11	13	11	11	12	12
Udr-O1b	McGuire																														
86421	dTm-McG	11	9	15	16	8	10	10	8	10	9	0**	22	22	16	10	12	12	16	8	13	22	20	13	12	11	13	11	11	12	12
108908	dJn-McG2	11	9	15	16	8	10	10	8	10	9	0**	22	22	16	10	12	12	16	8	13	22	20	13	12	11	13	11	11	12	12
44801	dTJMcG	11	9	15	16	8	10	10	8	10	9	0**	22	23	17	10	12	12	17	8	12	22	21	13	12	11	13	11	11	12	12
Bgn-O1a	Biggins																														
69648	dP-B1	11	9	15	16	8	10	10	8	10	9	0**	22	24	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
127469	dP-B2	11	9	15	16	8	10	10	8	10	9	0**	22	24	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
146867	dJm-B	11	9	15	16	8	10	10	8	10	9	0**	22	24	14	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
	Biggins																														
Line Modal	Bgn-O1aMH	11	9	15	16	8	10	10	8	10	9	0**	22	24	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12

Chart 72
Subgroup O1
Mixed Oriel Surnames, Part 4b
Results

		Marker Code																																						
Breifne Clans Project		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	4	G	Y	Y	4	6	5	5	C	C	4	4
Subgroup O1:		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
Mixed Oriel Surnames		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
Part 5a				or		a	b				i		ii		a	b							a	b	c	d		A										
Project				3																									I	I					a	b		
Code or	BCP			9																								H	I	I								
Kit/ID	Code			4																								4	a	b								
	FTDNA>	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 Haplotype																																						
Super W Atlantic	SWAMH	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
Clr-O1a	Clarke																																					
123611	EPC	13	24	14	11	11	15	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	19	36	36	12	12
130308	PJC2	13	24	14	11	11	15	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	19	36	36	12	12
117759	T-C	13	24	14	11	11	15	12	12	14	13	13	29	18	9	10	11	11	24	15	19	28	14	15	15	17	11	11	19	23	16	15	18	19	36	37	12	12
117758	JJC	13	24	14	11	11	15	12	12	14	13	13	30	18	9	10	11	11	24	15	19	28	14	15	15	17	11	11	19	23	16	15	17	19	36	37	12	12
Cnt-O1a	McKenna																																					
100576	P2-McK	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	12	19	23	16	15	18	19	35	36	12	12
64767	J-McK	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	12	19	23	16	15	18	19	35	36	12	12
64768	P1-McK	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	12	19	23	16	16	18	19	35	36	12	12
64771	K-McK	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	30	15	15	17	17	11	12	19	23	16	16	18	19	35	36	12	12
21156	G1-McK	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	26	15	19	29	15	15	17	17	11	12	19	23	16	15	18	19	35	36	12	12
&VA2IV	GFMcK	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	26	15	19	29	15	15	17	17	11	12	19	23	16	15	18	19	35	36	12	12
67837	R-McK	13	24	15	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	19	35	36	12	12
65962	Pr-McK	13	24	15	11	11	16	12	12	14	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	19	35	36	12	12
	McKenna																																					
Line Modal	McKMH	13	24	15	11	11	15	12	12	14	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	19	35	36	12	12

Chart 73
Subgroup O1
Mixed Oriel Surnames, Part 5a
Results

		Marker Code																													
Breifne Clans Project		5	5	3	3	5	5	6	4	4	5	4	4	4	5	5	4	4	5	4	4	4	5	4	6	5	4	5	6	4	5
Subgroup O1:		3	7	9	9	9	3	4	7	0	1	2	1	1	5	9	3	9	3	5	4	8	2	4	1	6	8	7	4	9	6
Mixed Oriel Surnames		1	8	5	5	0	7	1	2	6	1	5	3	3	7	4	6	0	4	0	4	1	0	6	7	8	7	2	0	2	5
Part 5b				S	S					S			a	b																	
Project				1	1					1																					
Code or	BCP			a	b																										
Kit/ID	Code																														
	FTDNA>	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67
Modal Haplotype																															
Super W Atlantic	SWAMH	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
Clr-O1a	Clarke																														
123611	EPC	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	10	11	12	12
130308	PJC2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	10	11	12	12
117759	T-C	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	10	11	12	12
117758	JJC	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	10	11	12	12
Cnt-O1a	McKenna																														
100576	P2-McK	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
64767	J-McK	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	13	22	20	13	12	11	13	11	11	12	12
64768	P1-McK	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
64771	K-McK	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
21156	G1-McK	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	13	8	12	22	20	13	12	11	13	11	11	12	12
&VA2IV	GFMcK	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	13	8	12	22	20	13	12	11	13	11	11	12	12
67837	R-McK	11	9	15	16	8	10	10	8	10	9	0**	22	23	15	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
65962	Pr-McK	11	9	15	16	8	10	10	8	10	9	0**	23	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
	McKenna																														
Line Modal	McKMH	11	9	15	16	8	10	10	8	10	9	0**	23	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12

Chart 74
Subgroup O1
Mixed Oriel Surnames, Part 5b
Results

					Marker Code																																	
Breifne Clans Project		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	4	G	Y	Y	4	6	5	5	C	C	4	4
Subgroup O1:		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
Mixed Oriel Surnames		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
Part 6a				or		a	b				i		ii		a	b							a	b	c	d		A										
Project				3																									I	I					a	b		
Code or	BCP			9																								H	I	I								
Kit/ID	Code			4																								4	a	b								
	FTDNA>	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 Haplotype																																						
Super W Atlantic	SWAMH	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
Rgl-O1a	O'Reilly																																					
121180	COO'R	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	14	19	28	15	15	17	17	11	11	19	23	16	15	19	18	36	37	12	12
Ulc-O1a	Calkins																																					
63104	dx-C2	13	24	14	10	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	18	36	37	12	12
70545	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	16	17	11	11	19	23	16	15	18	17	36	37	12	12
104240	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	16	17	11	11	19	23	16	15	18	17	36	38	12	12
56933	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	16	17	11	11	19	23	16	15	18	18	36	37	12	12
90197	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	17	17	10	11	19	23	16	15	18	18	36	37	11	12
102175	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	18	36	37	12	12
55805	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	18	36	37	12	12
64822	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	18	36	37	12	12
69438	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	18	36	37	12	12
93002	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	18	36	37	12	12
92235	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	18	37	37	12	13
71614	dx-C2	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	20	28	15	15	17	17	11	11	19	23	16	15	18	18	36	37	12	12
	Calkins																																					
Line Modal	Ulc-O1aMH	13	24	14	11	11	15	12	12	12	14	13	30	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	18	36	37	12	12
MOS	Airghialla 1																																					
Subgroup Modal	Arg1MH	13	24	14	11	11	15	12	12	13	13	13	29	17	9	10	11	11	25	15	19	28	15	15	17	17	11	11	19	23	16	15	18	19	36	37	12	12

Chart 75
Subgroup O1
Mixed Oriel Surnames, Part 6a
Results

Breifne Clans Project		5	5	3	3	5	5	6	4	4	5	4	4	4	5	5	4	4	5	4	4	4	5	4	6	5	4	5	6	4	5
Subgroup O1:		3	7	9	9	9	3	4	7	0	1	2	1	1	5	9	3	9	3	5	4	8	2	4	1	6	8	7	4	9	6
Mixed Oriel Surnames		1	8	5	5	0	7	1	2	6	1	5	3	3	7	4	6	0	4	0	4	1	0	6	7	8	7	2	0	2	5
Part 6b				S	S					S			a	b																	
Project				1	1					1																					
Code or	BCP			a	b																										
Kit/ID	Code																														
	FTDNA>	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67
Modal Haplotype																															
Super W Atlantic	SWAMH	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
Rgl-O1a	O'Reilly																														
121180	COO'R	11	9	15	16	8	10	10	8	9	9	0**	22	23	17	10	12	12	17	8	12	22	20	13	12	11	13	11	11	12	12
Ulc-O1a	Calkins																														
63104	dx-C2	11	9	15	16	8	10	10	8	10	10	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
70545	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
104240	dx-C2	11	9	15	16	8	10	10	8	11	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
56933	dx-C2	11	9	15	16	9	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
90197	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
102175	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
55805	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
64822	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
69438	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
93002	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
92235	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
71614	dx-C2	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
	Calkins																														
Line Modal	Ulc-O1aMH	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12
MOS	Airghialla 1																														
Subgroup Modal	Arg1MH	11	9	15	16	8	10	10	8	10	9	0**	22	23	16	10	12	12	16	8	12	22	20	13	12	11	13	11	11	12	12

Chart 76
Subgroup O1
Mixed Oriel Surnames, Part 6b
Results

****A value "0" for any marker indicates that the lab reported a null value or no result for this marker.**

There is some clustering evident in these results.

McGuire Cluster: The McAulays, the Biggins modal and one of the McGuires, Udr-O1b 44801, share values at two markers that are off the SWAMH and are erratically modal for this subgroup, 19 instead of 18 at DYS570 and 37 instead of 38 at DYS-CDYb, plus a deviant value at the slower moving DYS19 marker. The McGuire Udr-O1a modal shares this deviant value at DYS19 but only one of the other two. The Biggins has two, the McGuire Udr-O1b three, the McAulays four and the McGuire Udr-O1a modal five other deviant values not shared with any of the others in this subcluster.

Boylan Subcluster: The Boylan Bgl-O1a 65227 (tested only to the 37-marker level), the Dunphy Dnc-O1a 97145 and the O'Reilly share values at two markers that are off the SWAMH and the modal for this subgroup, including a deviant value at the slower moving DYS437. This Boylan and this Dunphy additionally share a deviant value at the slower moving DYS447. The Boylan and the O'Reilly share the erratic DYS-CDYb deviant value of this subgroup modal. The O'Reilly has four and the Dunphy five other deviant values not shared with each other.

The McDonald modal Dmn-O1b appears to fall between the two subclusters above, sharing the DYS447 deviant value with the Boylan Subcluster and the DYS19 plus the erratic DYS570 deviant subgroup modal value with the McGuire Subcluster. It also has another deviant value shared only with the Dunphy and two more not shared with any of the others in these two subclusters.

Higgins Subcluster: The Higgins, the McMahon modal and two Clarkes, Clr-O1a 117758 and Ysearch RDD6A, share values that deviate from the SWAMH and from this subgroup modal at two markers, plus the two erratic deviant subgroup modal values of 19 instead of 18 at DYS570 and 37 instead of 38 at DYS-CDYb. The Herrington shares the deviant value of one of the markers plus one of the erratic deviant subgroup modal values, having a deviant value at the other. The Higgins and the McMahon modal share an additional deviant value. The McMahon modal has zero, the Higgins and Clarke RDD6A one and the other Clarke two additional deviant values not shared with any of the others in this subcluster.

Heaney Subcluster: The Heaney, the Ó Donnchadha (Dunphy Dnc-O1a 104452), the two Kellys, the Smith modal and the Walker share one marker value that deviates from the SWAMH and from this subgroup modal. The Heaney, the O'Donnchadha, the Calkin modal, the Herrington and the Walker share a deviant value at the DYS570 marker while the Kelly Crb-O1a 107942 is off even further here and the other Kelly and the Smith modal share the erratic deviant subgroup modal value at this marker. The Heaney, the Kelly Crb-O1a 73887, the Calkin modal, the Herrington and the Walker share the erratic DYS-CDYb deviant value of this subgroup modal while the others have the SWAMH value at this marker.

The Heaney and the Herrington share a deviant value at an additional marker. The Ó Donnchadha and the Kelly 107942 share another deviant value, and the two Kellys share a different additional deviant value. The Smith modal and the Calkin modal have zero, the Heaney has one, the Kelly 107942, the Herrington and the Walker each have two, the Ó Donnchadha three and the Kelly 73887 six additional deviant values not shared with any of the others in this subcluster.

Callan Subcluster: The Carroll modal and the two McGuires Udr-O1b share an aberrant value that deviates from the erratic DYS570 subgroup modal value and share the SWAMH value instead of the erratic DYS-CDYb deviant subgroup modal value. The Callan shares the aberrant value at the DYS570 marker with the Carroll modal and the McGuires, and shares an aberrant value at the erratic DYS-CDYb marker with the two Clarkes, Clr-O1a 117758 and RDD6A, and with the McKenna modal. The Callan, the McKenna modal and the McGuire Udr-O1b 108908 share a deviant value at an additional marker. The McKenna modal and the Clarkes share the SWAMH value at DYS449 as well as the erratic DYS570 deviant subgroup modal value. The McKenna modal shares the deviant value at the slower moving DYS19 with those in the McGuire Subcluster and a deviant value at an additional marker with some in the Higgins Subcluster (the Higgins, the McMahon modal and the two Clarkes). The Clarkes share deviant values with each other at two additional markers. The Clarkes and the McGuire 108908 have zero, the Callan and the McKenna modal each have two, the Carroll modal and the other McGuire each have three additional deviant values not shared with any of the others in this subcluster.

The McDonald Dmn-O1a modal matches very closely the modal of this subgroup, being off by only one in the value at one marker, DYS557.

For this subgroup, the values for DYS570 appear to approximate the ratio of 9:13 for the values 18 and 19, and the values for DYS-CDYb of 36, 37 and 38 follow approximately the ratio of 3:12:7. 17 and 38 are the respective SWAMH values.

On the basis of these haplotype profiles, those most clearly related are (1) the McGuire Udr-O1b 44801, the McAulays and the Biggins modal; (2) the Higgins, the McMahon and two Clarkes, Clr-O1a 117758 and RDD6A; and (3) the Boylan, the Ó Donnchadha Dnc-O1a 97145 and the O'Reilly.

The calculated strengths of the various links, in terms of the number of generations back to include the most recent common male-line ancestor at the 99% probability level, of the nine members of this subgroup who are BCP participants are shown below in Chart 77 for the 37-marker level.

Breifne Clans Project	15 – 18	27 – 30	39 – 42	Least # of Generations Needed
Subgroup O1:	19 – 22	31 – 34	43 – 46	to Include the Most Recent
Mixed Oriel Surnames	23 – 26	35 – 38	47 – 50	Common Male-Line Ancestor
37-Marker Level	Color Code for Degree of Closeness of Link			at the 99% Probability Level

Kit	BCP Code	Surname	J F B	M W B	C O R	dA – C	V – S	J J 2	T R C	E P C	P J C	P J 1	J – D	G L D	R E D	G P O' D	H – O' S
65227	JFB	Boylan	x	26	39	46	49		46	48	–	48		49			
46952	MWB	Boylen	26	x	46		46		49	47	–						
121180	COO'R	O'Reilly	39	46	x	43			49		–	49					
32061	dA-C	Carroll	46		43	x		50			–						44
122652	V-S	Smyth	49	46			x				–	49					
			O1a														
			Various														
117758	JJC2	Clarke				50		x	21		–						
117759	TRC	Clark	46	49	49			21	x	44	–			50			
123611	EPC	Clarke	48	47					44	x	2			47		49	
130308	PJC2	Clarke	–	–	–	–	–	–	–	2	x						
								Clr-O1a									
								Clarke									
43739	PJC1	Corrigan	48		49		49					x					
												Corrigan					
130859	J-D	Donohue										Crg-P1a	x				
35979	GLD	Donoghue	49						50	47				x	24	30	
61435	RED	Donahue												24	x	44	
121176	GPO'D	O'Donoghue								49				30	44	x	
													Dnc-D1b				
													Donohue				
91857	H-O'S	O'Shea				44											x
																	O'Shea
																	Sgd-X1a
												Subgroup O1					

Chart 77
Subgroup O1
Mixed Oriel Surnames
GMRCA99, 37-Marker Level

It can be seen that subcluster of the four Clarkes are set slightly apart from the subcluster of the other five by the strength of their links. More curiously, both subclusters appear to have weak links with members of entirely different

subgroups. The Corrigan belongs to the subgroup associated with the other Airghialla modal haplotype discussed in this report (see Section P), the Donahue subcluster contains members whose haplotype profiles resemble the South Irish Modal Haplotype and who appear to have Desmond origins, and the O'Shea has not been placed in any subgroup yet but the name O'Shea is also traditionally associated with Desmond. The Corrigan, the Donahue subcluster and the O'Shea display no links with one another.

The impression given is that the members of Subgroup O1 have haplotype profiles that are intermediate among the haplotype profiles of the others. The possibility is raised that the Airghialla represented in this subgroup may have a common origin with some southern Irish clans, whether in Oriel or in Desmond or elsewhere.

To examine this question further, the FTDNATiP calculator was applied to those in Chart 73 above who had tested to the 67-marker level. This reduced the Subgroup O1 members from nine to seven, since the Boylans have not yet tested to the 67-marker level, and the others were cut in half, leaving two of the Donahues and the O'Shea. The results are shown in Chart 78 below.

Breifne Clans Project			15 – 18	27 – 30	39 – 42	Least # of Generations Needed
Subgroup O1:			19 – 22	31 – 34	43 – 46	to Include the Most Recent
Mixed Oriel Surnames			23 – 26	35 – 38	47 – 50	Common Male-Line Ancestor
67-Marker Level			Color Code for Degree of Closeness of Link			at the 99% Probability Level
			C U V	J T E P	R G	H
	BCP		O – –	J R P J	E P	–
Kit	Code	Surname	O'			O'
			R C S	C C C C	D D	S
				2	2	
121180	COO'R	O'Reilly	x 41 43	46 44 45 –		
32061	dA-C	Carroll	41 x 46	47 48 –		
122652	V-S	Smyth	43 46 x	48 44 –		
			O1a			
			Various			
117758	JJC2	Clarke	46 47	x 17 39 –		
117759	TRC	Clark	44 48 48	17 x 31 –		
123611	EPC	Clarke	45 44	39 31 x 2		
130308	PJC2	Clarke	– – –	– – 2 x	– –	
				Clr-O1a		
				Clarke		
61435	RED	Donahue		–	x 37	
121176	GPO'D	O'Donoghue		–	37 x	
					Dnc-D1b	
					Donohue	
91857	H-O'S	O'Shea				x
						O'Shea
						Sgd-X1a
			Subgroup O1			

Chart 78
Subgroup O1
Mixed Oriel Surnames
GMRCA99, 67-Marker Level

At this level the links among the members of Subgroup O1 tighten, as do the links between the two Donahues of Subgroup D1, and the distance increases between the two subgroups so that there are no links at all between them. The sample size is too small for the result to be definitive, but that result is supported by the liklihood that the 9-null-22 triple deviation in the last 30 markers is a significant factor here.

Comparing the Subgroup O1 modal developed here with the South Irish

Modal Haplotype shows almost a complete lack of resemblance, with only one coincident marker value deviating from the SWAMH. The same is true in a comparison of the Subgroup O1 modal with the Subgroup P1 modal (see the following section).

The sum of the evidence here indicates that the links apparent at the 37-marker level are false positives due to random convergent mutation.

Subgroup O1 includes the representation of a good number of surnames traditionally associated with the Airghialla and the territory later described as Oriel. Those that fall into this category are **McAulay** (Mac Amhlaoibh of Clan Awley), **Boylan** (Ó Baoighealláin of Dartraighe), **Callan** (Ó Cathaláin of Fearnmhaigh), **Carroll** (Ó Cearbhail of Fearnmhaigh), **McDonald/McDaniel** (Mac Domhnaill of Clan Kelly), **McGuire** (Mag Uidhir of Fermanagh), **Heaney** (Ó hÉignigh of Airghialla), **Higgins** (Ó hAodhagáin of Dartraighe), **Kelly** (Ó Ceallaigh of Teallach Foghartaigh), **McKenna** (Mac Cionaoith of Truagh), **McMahon** (Mac Mathghamhna of Airghialla). The professional surnames of **Smith** (Mac Gobhan) and **Clarke** (Ó Cleirigh) originated independently in several parts of Ireland. There was a **Biggins** (Mac? Beagáin) branch of the McGuires and a **Matthews** (used as an English equivalent) branch of the McMahons. There are no obvious Airghialla associations for the remaining six of the 21 names: **Calkin, Dunphy/Donoghue** (Ó/Mac Donnchadha), **Herrington** (Ó hOireachtaigh), **Pate**, **O'Reilly** (Ó Raghallaigh) and **Walker**.

The early medieval kingdom of the Airghialla is described in the traditions as having been established by the three Collas in the fourth century. The is no person mentioned in the Annals of Ulster (AU) as a king of Airghialla, however, until Colga son of Loite son of Crunn son of Feidhlimidh {son of Colla Dachrich}, lord (taoiseach) of Airghialla, who was active in 513[24] [Vol. I, pp. 168-169], and Cairpri Daim-argit [Cairbre Daimh Airgid], king (ri) of Aighialla, who died in 513 [*recte*: 514].[46] [Vol. I, pp. 38-39] Although this Cairbre is mentioned in the list of kings of the Airghialla, this Colga is not.[47] [Vol. II, pp. 74-75] In the fourth century the territory of the Airghialla is thought to have included the western two-thirds of Ulster. In was downhill after that, due to the encroachments of the Uí Néill from the west, later combined with the depradations of the Vikings and then the invasion of the Anglo-Normans, so that Oriel became considerably reduced. By the early seventh century it included the area of the modern counties of Armagh, Monaghan, part of Tyrone and [part of] Louth.[24] [Vol. I, p. 255, n. u], and by the ninth century it covered the modern counties of Monaghan, Armagh, Fermanagh and part of Louth[49]. In response to continuing pressure exerted by the Uí Néill, the Airghialla sought to expand to the south and in the late 10th to early 11th centuries the Fir Fernmhaigh under the O'Carrolls moved the center of their power from Clogher in modern Co. Tyrone to the southeast of modern Co. Monaghan, and then extended their conquests over the whole of modern Co. Louth, pushing out smaller and weaker groups in the process.[48] [pp.12-13] In the 13th century there were further constrictions eventually confining Oriel to roughly the area of

modern Cos. Monaghan and Armagh until it was finally extinguished in the 16th century by the Tudor English.

The Airghialla have been described as a federation rather than as a single kindred by some historians, but there is a medieval tradition tracing all of the ruling kindreds to one or another of the three Collas. The three Collas were sons of Eochad Doimhlén, said to have been a son of Cairbre Liffechair, High King of Ireland. According to the Annals of the Four Masters (AFM), in 322 the three Collas slew their uncle, Fiacha Sraibhtinne, High King of Ireland [son of Cairbre Liffechair and grandfather of High King Eochu Mugmedoin], in Crioch Rois, which included a part of Farney.[24] [Vol. I, pp. 122-23 & note l] Colla Uais, the senior brother, succeeded as high king and reigned until 326 (or 329) when he was deposed and all three Collas were banished from Ireland.[24] [Vol. I, pp. 122-23 & n. m] In 331 the Collas [returned and rehabilitated] are recorded as having defeated the Ulaidh at a battle in Fearnmagh and to have taken from them all of Ulster west of the River Newry and Lough Neagh.[24] [vol. I, pp. 124-25]

The Oriel surnames represented here, or possibly represented here, are those of descendants of only one of these three brothers, Colla Dhá Chríoch, according to the traditional accounts. The following are these surnames:

The **Mac Mathghamhain** (McMahon/Mathews) descend from Mathghamhain O'Carroll (d.1022), Lord of Fearnmhagh (Farney). In 1022 Mathgamhain son of Laidgnen, king of Fernmagh, was killed by Cathalan Ua Crichain, in the middle of Cluain-Eois [Clones].[46] [Vol. I, pp. 550-551] As the AFM have it under the year 1022, Mathghamhain son of Laidhgnéin son of Círbhall, lord of Fearnmhagh, was slain at Cluain-Eois by Cathal[án] Ua Crichain.[24] [Vol. II, pp. 802-803] The eponymous ancestor of the **Ó Cearbhaill** (O'Carroll) was Cearbhall, who died about 950. The AFM records the death of Cearbhall's uncle Donnagán son of Focartach, lord of Fearnmagh, in 879[24] [Vol. I, pp. 528-529], and the death of his son Laidhgnén, lord of Fearnmhagh, in Ard-Macha in 987 [*recte*: 988][24] [Vol. II, pp. 720-721], while according to the Annals of Ulster (AU), Donnacan son of Fogartach, king of Fernmhagh, was slain in 881 and Laidgnan son of Cerbhall, king of Fernmhagh, was killed in Ard-Macha in 987 [*recte*; 988].[46] [Vol. I, pp. 399, 496-497] Cearbhall son of Maol Pól son of Foghartach was in the eleventh generation down from Nad Sluaigh and so belonged to the Uí Nadsluaigh, a division of the Uí Cremthainn.[47] [Vol. II, pp. 42-43] The eponym of the latter, Crimthann son of Fiach son of Daigh Dorn, is represented in the traditional genealogies as a grandson of Daigh Dorn son of Rochaidh son of Colla Dhá Chríoch.[47] [Vol. II, pp. 20-21] King Cairbre Daimh Airgid (Cairbre "Silver Ox"; mentioned above), son of Eochaidh son of the Crimthann above, was the father of Nad Sluaigh, ancestor of the Uí Nadsluaigh, also known as the Fir Fearnmagh ("Men of Farney").[47] [Vol. II, pp. 20-21] The name Fearnmagh was apparently transferred from the region around Loch Uaithne (Lough Ooney) in Dartraighe, later known as the barony of Dartry in the west of Co. Monaghan, to the southeastern portion of Co. Monaghan later known as the barony of Farney when

the Ó Cearbhaill became centered there [around 1100].[49]

The **Ó Cathaláin** (Callans) also belong to the Fir Fearnmhaigh. As mentioned above, In 1022 Mathgamhain son of Ladhgnén son of Cearbhall, lord of Farney, was killed in Cluain Eoais [Clones, Co. Fermanagh] by [his third cousin?] Cathal[án] ua Cricháin in 1022.[24] [Vol. II, pp. 802-803] AU records that in 1022 Mathgamhain son of Laidgnen, king of Fermnagh, was killed by Cathalán Ua Cricháin in the middle of Cluain-Eois.[46] [Vol. I, pp. 399, 496-497] In the same year the first cousin or brother of this Cathalán, Macleighinn son of Coireall, lord of Oirghialla, died after {doing} penance for his sins.[24] [Vol. II, pp. 802-803] Mac Léighinn was the son of Caireall son of Críochán son of Lorcan son of Donnagán son of Foghartach son of Ruadhrí.[47] [Vol. II, pp. 44-45] Donnagán was the son of Foghartach son of Ruadhrí son of Maol Foghartaigh son of Artrí son of Aiteacht[/Aitheachda].[47] [Vol. II, pp. 43-44] Maelfothartaigh son of Artri was slain in battle in 791 near Tailtiu while supporting the king of Uí Cremthainn.[46] [Vol. I, pp. 270-271] Cathalán Ó Criocháin, lord of Fearnmhagh and of the Airghialla in general, and Cúlocha Ó Gairbhith, lord of Ui-Meith, mutually fell by each other [in combat].[24] [Vol. II, pp. 802-803][46] [Vol. I, pp. 558-559] The Ó Cathaláin descend from this Cathalán Ó Críocháin, whose grandfather Críochán appears to have been the son of Lorcán son of Donnagán, this Donnagán [died 879, lord of Fearnmagh] being the paternal uncle of Cearbhall son of Maol Pól son of Foghartach, eponym of the Ó Cearbhaill mentioned above.[47] [Vol. II, pp. 44-45]

The **Ó hÉigneaigh** (O'Heaney) take their surname from Éigneach son of Dálach (ancestor of Muintir Dhálaigh) son of Odhar.[47] [Vol. III, pp. 464-465] Eicnech son of Dalach, king of the Airghialla, and his son Dubhdara were slain in 962 [*recte*: 963] by his brother Murchad.[46] [Vol. I, pp. 478-479] In 961 [*recte*: 963] Ecnech son of Dálach, lord of Oirghialla, and his son, i.e. Dubhdara, were killed.[24] [Vol. II, pp. 682-683] In 1053 Niall Hua Eignigh (Niall Ua hEignigh), king of Fera-Manach, was killed by the Fera-Luirg.[46] [Vol. I, pp. 594-595] Éigneach's grandfather Odhar son of Cearnach son of Lughán was the ancestor of the Teallach Uidhir and belonged to the Clann Lugháin, named for his own grandfather.[47] [Vol. II, pp. 30-31] This grandfather, Lughán son of Íorghalach son of Éigneach, is placed in the seventh generation in descent from King Cairbre Daimh Airgid through his son Cormac, ancestor of Clann Cormaic.[47] [Vol. II, pp. 22-23] Thus the Clann Lugháin belong to the Uí Cormaic. Lughán was the son of Íorghalach son of Éigneach son of Cormac son of Fearghus son of Aodh son of Cormac son of Cairbre Daimh Airgid.[47] [Vol. II, pp. 22-23; same in Vol. III, pp. 464-465]

The **Mag Uidhir** (McGuire/McGuire) [kings of Fermanagh, or Fir Manach, 14th–17th centuries] descend from Odhar [Óg] son of Searrach son of Odhar son of Searrach son of Oirghiallach son of Odhar [ancestor of Teallach Uidhir] son of Cearnach son of Lughán [ancestor of Uí Lugháin].[47] [Vol. II, pp. 22-23] By this descent the McGuires and their several branches of various surnames belong to the Teallach Uidhir division of the Clann Lugháin. By tradition the Maguires are a branch of the Uí Lugháin of the Uí Cormaic of the Uí Crimhthainn, descendants

of Colla Dhá Chríoch. Livingstone views the genealogies underpinning this tradition as "faulty" and speculates that the Maguires may have a Leinster origin.[67] [p. 26] After becoming kings of Fermanagh at the beginning of the 14th century, the Maguires threw off several branches of different surnames over the following century and a half. Magnus son of Aodh Ruadh son of Flaithbheartach Maguire (d. 1358) was the ancestor of at least one branch called McManus and Donnchadh son of Aodh son of Pilib na Tuaigh Maguire (d. 1473) was probably the ancestor of the McDonahys/Donohoes (see the discussion in Report 2).

One correction that might be made to the Maguire discussion in Report 2 is that Odhar Óg (son of Searrach son of Odhar) himself is probably the eponym of the Mag Uidhir or Maguires, and not his grandfather Odhar son of Searrach son of Oirghiallach, and definitely not his great-great-great-grandfather Odhar son of Cearnach son of Lughán, who was the ancestor of the Teallach Uidhir.

Donn [Carrach] (d. 1345 [*sic; recte* d. 1302]) son of Domhnall son of Giolla Íosa son of Donn Óg son of Domhnall son of Giolla Íosa son of Donn Mór son of Raghnall son of Odar Óg [the eponym of the Síol Uidhir, called Mag Uidhir] was the first Maguire king of Fermanagh.[47] [Vol. II, pp. 22-23] Donn the first Mag Uidhir was lord of Fermanagh by 1264, but it was a much smaller Fermanagh north of Lough Erne, minus Clankelly, Tirkennedy and Lurg, and centered probably on Lisnaskea.[67] [pp. 27-28] Murceartach son of Domhnall Uí Airt (Murtough son of Donnell O'Hart) was killed, and his people were burned by Donn Mág Uidhir (Donn Maguire) in 1264.[24] [Vol. III, pp. 392-393] In 1298 [*recte* 1302] Donn Mag Uidhir, king of Fir-Manach, namely, the first king of Fir-Manach of the sons of Mag Uidhir, rested in Christ.[46] [Vol. II, pp. 398-399] In 1302 Donn Carrach Mág Uidhir (Donn Carrach Maguire) … died.[24] [Vol. III, pp. 476-477]

The Fir Manach, ruled by the Mac Uidhir and other related lines before them, are said to descend from Aodh son of Nad Sluaigh son of Cairbre Daimh Airgid.[47] [Vol. II, pp. 20-21] This ancestry may be a bit garbled, as the Mag Uidhir and the Uí Lugháin descend from Aodh son of Cormac son of Cairbre Daimh Airgid.[47] [Vol. II, pp. 22-23] Perhaps this ancestry applies only to the rulers, since elsewhere the Fir Manach are said to descend from Fiachra Manach son of Fiag son of Muireadhach son of Oilill Mór son of Bracán son of Fiac son of Dáire Barrach son of Cathaoir Mór.[47] [Vol. II, pp. 260-261] This would give the Fir Manach a Leinster origin.

Donn Óg son of Domhnall son of Giolla Íosa son of Donn Mór son of Raghnall is said to have had four sons, none of them named Giolla Íosa but including Flaithbheartach, "from whom is the royal line".[47] [Vol. II, pp. 24-25] This suggests that the "Donn [Carrach] son of Domhnall son of Giolla Íosa" generations artificially duplicate the "Donn [Óg] son of Domhnall son of Giolla Íosa" generations and that Donn Carrach was identical to Donn Óg. Mac Fhirbhisigh elsewhere gives Donn (the first person who was called Mág Uidhir) as son of Domhnall son of Giolla Íosa son of Donn son of Donn son of Raghnall

son of Odhar.[47] [Vol. III, pp. 464-465] In all other versions where the ancestry of this Giolla Íosa appears, he is given as the son of Donn (Mór) son of Raghnall, so the extra Donn appears to be an error of repetition in this version.[47] [Vol. II, pp. 21-23, 24-25 x 2] Donn Carrach died in 1302 and was mentioned as an active lord nearly forty years earlier, in 1264. If he had been born about 1230 he would have been about 72 at the time of his death, which would have been remarkably old for those days. According to the traditional genealogies, Donn Óg's ancestor Searrach son of Oirgiallach son of Odhar (ancestor of the Teallach Uidhir) had a first cousin, Éigneach son of Dálach son of Odhar, who was king of the Airghialla and died in 963, about 170 years before the early estimate for the year of birth of Donn Carrach. Donn Óg would have been in the eighth generation down from Searrach. If Donn Óg were identical with Donn Carrach, and assuming that the relationship with Éigneach is valid, this would imply an average generation time of about 21 years, which seems a bit on the short side. Adding three generations would reduce that average generation time even further, so there is an added argument here that those generations do not belong in the genealogy.

The **Mac Amhlaoibh Mag Uidhir** (McAuley Maguire) apparently descend from Amhlaoibh son of Donn [Óg/Carrach] son of Domhnall son of Giolla Íosa son of Donn Mór son of Raghnall son of Odhar Óg, as in the Mag Uidhir paragraph above.[47] [Vol. II, pp. 22-25] In the 14th century they moved across Lough Erne and attacked Muinter-Pheódacháin, a territory including most of the later baronies of Magheraboy and Clanawley in Co. Fermanagh. They apparently defeated the Mac Giolla Finnéin (McGilfinnen), the earlier rulers of Muintir-Pheódacháin, and wrested control of the territory from them intermittently in the early 14th century for a couple of generations, after which the Mac Giolla Finnéin were back in power. Amhlaim Mag Uidhir, namely, son of Donn Carrach, chief of Muiter-Peodaha{i}n, died on the 14th of the Kalends of July {18 June} 1306 [*recte* 1310].[46] [Vol. II, pp. 418-419] In 1310 Corbmac Ua Flanaccáin (Cormac O'Flanagan), Chief of Tuathratha, was slain by Henri Mac Gillefinnéin (Henry McGilfinnen), Chief of Muintir Feódacháin.[24] [Vol. III, pp. 496-497] In 1319 [*recte* 1322] Henry Mac Gille-Finnein, chief of Muinter-Peodacha{i}n, was killed by the sons of Amlaim Mag Uidhir.[46] [Vol. II, pp. 436-439] Hannraoi Mac Gillefhinnéin (Henry McGilfinnen), Chief of Muintir-Feodachain, was slain by the sons of Amhlaoibh Még Uídhir (Auliffe Maguire).[24] [Vol. III, pp. 526-527] Amhlaoibh Mhag Uidhir (Auliffe Maguire) died in 1326.[24] [Vol. III, pp. 534-535] Pilib [son of Amhlaoibh] Mag Uidhir (Philip [son of Auliffe] Maguire), lord of Muintir Pheódacháin, died in 1348 [*recte* 1351].[46] [Vol. II, pp. 492-493] Part of Muintir-Peódacháin eventually became known as Clanawley after the descendants of Awley Maguire [Amhlaim Mag Uidhir (Auliffe Maguire, d. 1310)]; the Maguire portion of the surname was dropped with the sons of Brian McAwley Oge Maguire (d. 1466) of Clanawley.[74]

The **Clann Mheic Domnaill** (McDonnell/McDonald/McDaniel) are descendants of Domhnall son of Colga son of Ceallach, ancestor of Clann Ceallaigh [a division of the Síl Daimhíni], son of Tuathal son of Maol Dúin son of Tuatán son of Tuathal son of Daimhín, son of King Cairbre Daimh Argid [for

whom see above].[47] [Vol. II, pp. 36-37] They would therefore belong to the Síol Daimhíni. Domhnall son of Colgu was slain in battle near Tailtiu [Telltown] along with the king of Uí-Cremthainn.[46] [Vol. I, pp. 270-271] This Domhnall would seem to be the most likely origin for the McDonald/McDaniel associated with the modal haplotype of this subgroup, but his line appears to be at least seven generations short for a "mac" name.

The **Mac Cionaoith** (McKenna) are traditionally not of Airghialla origin, but rather belong to the Cenél Fiachach of Meath [a division of the Southern Uí Néill], and were brought in [as mercenaries] by the Fir Lemhna and settled at Truagh.[50] This may be a confused tradition, however. Mac Firbhisigh states that some of the descendants of Tuathal an Tuaiscirt son of Fiach son of Niall Naoighiallach are called Clanna/Ceinéal Fiachach Fhir Leamhna in the north, and he further says that the story that the seven sons of Daimhín of Clochar mac nDaimhín [Clogher, Co. Tyrone] were the sons of Daimhín Dreachargaid is not true, because the seven sons are also called Síol Tuathail and Daimhín Dreachargaid was just another name of Tuathal an Tuaiscirt.[47] [Vol. I, pp. 380-381] Mac Firbhisigh also records, however, that Daimhín [son of King Cairbre Daimh Airgid, as above] had among his nine sons Tuathal, from whom are the Uí Tuathail.[47] [Vol. II, pp. 20-21]

The descent of the **Ó Ceallaigh** or Mac Ceallaigh (Kelly) is unclear. Mac Firbhisigh gives Uí Ceallaigh as belonging to Teallach Foghartaigh, descendants of Fogartach son of Fíonachta son of Domhnall [see McDomhnaill above] son of Colga son of Ceallach son of Tuathal son of Maol Dúin son of Tuatán son of Tuathal son of Daimhín.[47] [Vol. II, pp. 34-37] Mac Firbhisigh also gives Mac Meic Ceallaigh as deriving from Ceallach son of Domhnall son of Cumascach, a descendant in the 13th generation down of Fiachra Cassán son of Colla Fo Chrí [= Colla Dhá Chríoch].[47] [Vol. II, pp. 10-13]

The **Ó Baoighealláin** were rulers of Dartraighe also at times kings of the Airghialla. Mac Firbhisigh gives Clann/Uí Baoighealláin as belonging to Clann Donnghaile son of Cumascach[47] [Vol. III, pp. 466-467], and as deriving from Dúnghal/Donnghal son of Cumascach son of Learghus son of Dubh Dinne son of Fionnchú/Finnéan son of Faolbha son of Baodán son of Tuatán son of Tuathal son of Daimhín son of [King] Cairbre Daimh Airgid [and so belonging to the Síol Daimhíni]. [47] [Vol. II, pp. 30-33] Like the Cianachta, the Dartraighe appear in various parts of Ireland. The Ó Baoighealláin ruled the Dartraighe Coininse, situated in what is now Co. Monaghan. The Dartraighe descend from Doighre Dart son of Cronn of Luachair (ancestor of Teallach Cruinn of Luachair) son of Fionn; Doighre Dart is given as in the 19th generation of descent down from Dáire Doimtheach son of Síothbholg son of Deaghamhair.[47] [Vol. II, pp. 674-675] From this it is evident that the Dartraighe as an agnatic population group are not at all related to the descendants of Colla Dhá Chríoch. Perhaps by the time the Ó Baoighealláin had become the rulers in the 11th and 12th centuries Dartraighe had come to be more of a geographic concept.

The **Ó hAodhagáin** (O'Higgins) were lords [once] of Dartry [Dartraighe Coininse] in [modern] Co. Monaghan and [once] of Uí Nialláin in [modern] Co. Armagh in the 10th and 11th centuries.[51] [p. 557] Scolaige ua hAedacáin, king of Dartraighe, died in battle in 947; Dubhgall Ua h-Aedhogáin, tigherna [lord] Ua [*recte* Uí] Nialláin, was slain in 1054 by Ua Laithén.[49] Mac Firbhisigh does not refer specifically to the Ó hAodhagáin, and lists only a single Aodhagán in his Airghialla pedigrees: Aodhagán Cearr son of Cumascach son of Learghus, who was in the ninth generation down from the Daimhín son of King Cairbre Daimh Airgid mentioned above [and thus belonged to the Síol Daimhíni].[47] [Vol. II, pp. 30-33] The eponymous Aodhagán may have been someone else, but this Aodhagán is a possibility as being the sole one of the name of the Airghialla important enough to be recorded by the medieval genealogists, and as being a brother of Donnghal son of Cumascach son of Learghus, ancestor of the Ó Baoighealláin, also sometime rulers of the Dartraighe, as mentioned above.

Mac Fhirbhisigh gives a summary of the descendants of Colla Dhá Chríoch, translated as follows, with those belonging to the Uí Cremhthainn marked in bold: 'These, then, are the family of Colla Dhá Chríoch, or Fo Chrí: all the Oirthir and **the royal line of the Dartraighe**, i.e. Coininis, and Uí Mhéith and **Fir Fhearnmhuighe {= men of Fearnmhagh}** and **[the royal line of?] Fir Mhanach** and Fir Leamhna and Síol Duibhthíre and Uí Bhriúin of Archoill and Fir Rois and Fir Mhaine and Fir Dhubhshlat, Uí Cheannfhada, Uí Mheic Bhróc, Uí Eachach Beaga, Uí Eachach Móra, Uí Thortainn, Uí Nialláin, and Uí Chonaill, i.e. the craftsmen of Uí Bhreasail of Macha, and Mudhorna (or Muighe Dorn) and **Uí Chreamhthainn** and **Uí Luain [Lugháin?]** together with their relations.' [47] [Vol. II, pp. 8-9]

It is apparent from the above that the surnames here are representative of those traditionally associated with not only just one of the three Collas, Colla Dhá Chríoch, but in fact with only one descendant of Colla Dhá Chríoch in the fifth generation, King Cairbre Daimh Airgid, and further through only three of his seven sons, Nad Sluaigh, Cormac and Daimhín.

The surnames of the Uí Nadsluaigh represented here all come down through Foghartach son of Ruadhrí son of Maol Foghartaigh son of Artrí son of Aitheachda son of Maol Foghartaigh son of Maol Dubh/Dúin son of Rónán/Crónán son of Fearghus son of Nad Sluaigh.[47] [Vol. II, pp. 42-45] Maol Foghartaigh son of Maol Dubh/Dúin son of Rónán/Crónán above was king of the Airghialla and died in 695. As the AFM have it, Maelfothartaigh, lord of the Oirghialla, died in 695.[24] [Vol. I, pp. 298-99], while AU states that Mailfothartaigh son of Maeldubh, king of the Airghialla, died in 696[46] [Vol. I, pp. 146-147]. Ruaidhri son of Maelfothartaigh [son of Artrí], half-lord/half-king of Ui-Crimhthainn, died in 832.[24] [Vol. I, pp. 448-449][46] [Vol. I, pp. 330-331].

These relationships are summarized in Tables 4, 5, 6 and 7 below.

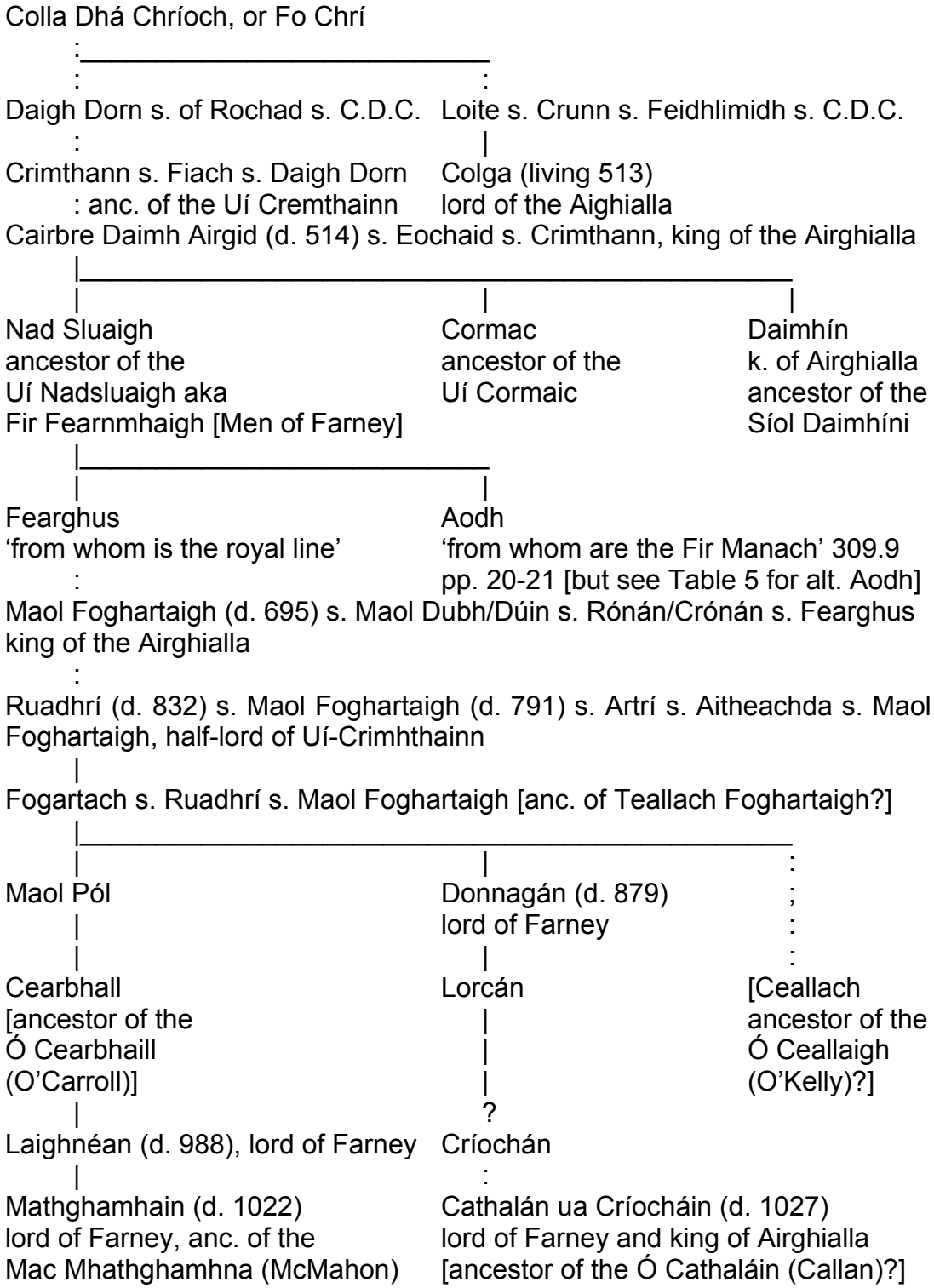

Table 6
Uí Cremthainn
Uí Nadsluaigh Branch

Colla Dhá Chríoch, or Fo Chrí
:
Daigh Dorn son of Rochad s. Colla Dhá Chríoch
:
Crimthann s. Fiach s. Daigh Dorn, ancestor of the Uí Cremthainn
:
Cairbre Daimh Airgid (d. 514) s. Eochaid s. Crimthann, king of the Airghialla

Nad Sluaigh ancestor of the Uí Nadsluaigh aka Fir Fearnmhaigh	Cormac ancestor of the Uí Cormaic	Daimhín k. of Airghialla ancestor of the Síol Daimhíni

Aodh [alternative ancestor of (the rulers of) the Fir Manach? – see Table 4]
:
Éigneach s. Cormac s. Fearghus s. Aodh
:
Lugháin s. Íorghalach s. Éigneach
ancestor of the Uí Lugháin

Odhar, ancestor of the Teallach Uidhir	Fearghal king of Fir Manach anc. Clann Fearghail

Dálach, anc. Muintir Dhálaigh	Oirghiallach : Searrach s. Odhar s. Searrach s. Oirghiallach | | Odhar Óg ancestor of Mag Uidhir aka Síol Uidhir (Maguire/McGuire)

Éigneach (d. 963)
king of the Airghialla
ancestor of Ó hÉignigh
(O'Heaney)
:
Niall ua hÉicnigh (d. 1053)
king of Fir Manach

Table 7
Uí Cremthainn
Uí Cormaic Branch

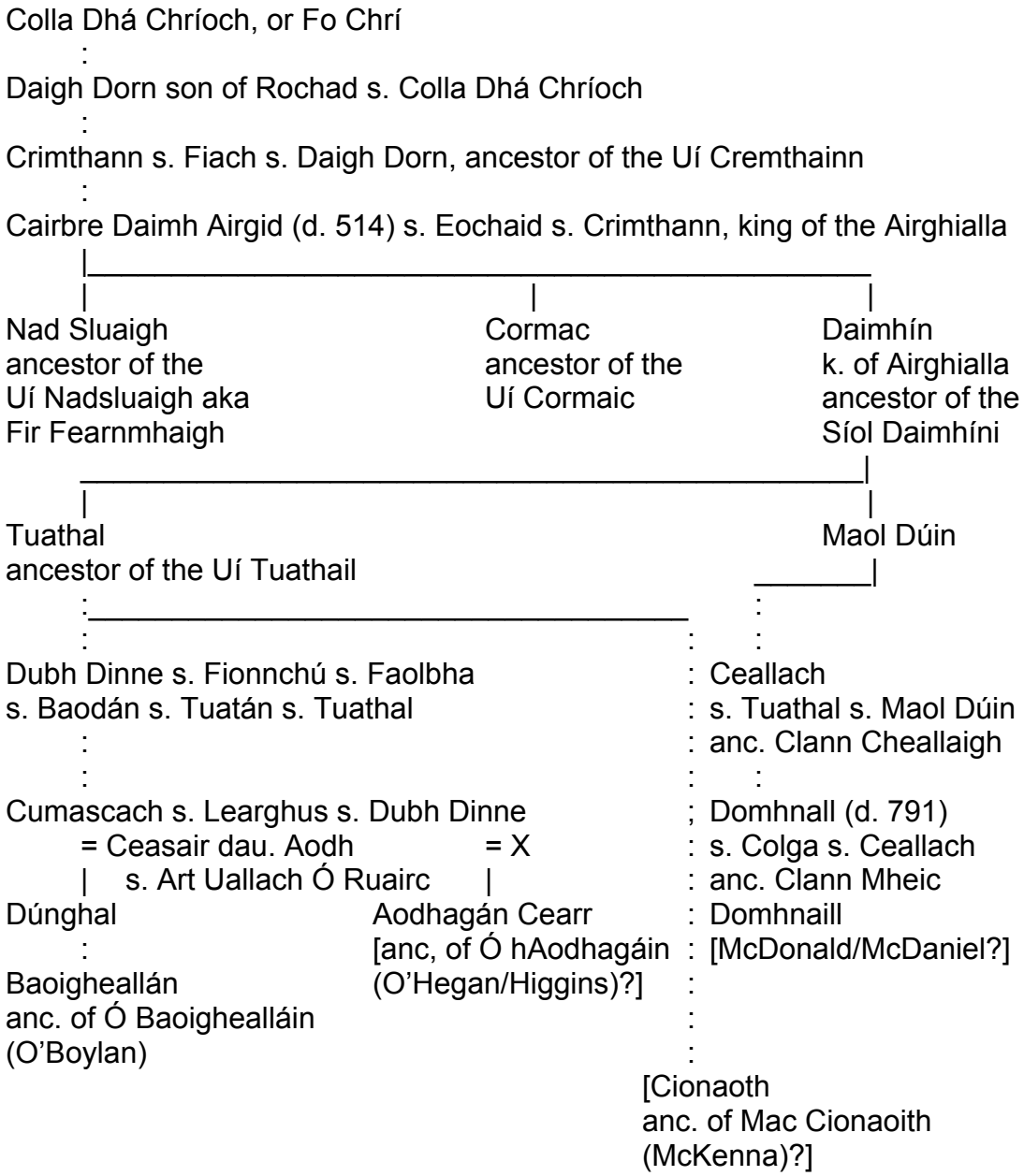

Table 8
Uí Cremthainn
Síol Daimhíni Branch

The surnames represented in this subgroup are only a few of the many traditionally associated with the Airghialla, i.e. the descendants of the three Collas. Only one of the three Collas, Colla Dhá Chríoch, is represented here.

This suggests that either the three Collas were not all related to each other, or that the members of this subgroup do not descend from Colla Dhá Chríoch. If they do in fact descend from him, then the tradition that Colla Dhá Chríoch was an agnatic first cousin once removed of High King Eochu Mugmedoin is not supported, as the male descendants of the latter appear to belong to a different haplogroup, Haplogroup R1b-M222.

Further, the surnames represented in this subgroup that are clearly identified as to traditional descent are all associated with the descendants of King Cairbre Daimh Airgid. If in fact they are all descended from him, then there is a representation here of only a single son in every one of the six generations from him back to Colla Dhá Chríoch. Only one in this line, Rochaid, is definitely said to have had only a single son.[47] [Vol. II, pp. 20-21] This diminishes confidence in the pedigree of King Cairbre Daimh Airgid, and suggests either that he had traditional line of ancestry back to Colla Dhá Chríoch that was artificially attached to an independent genealogy or that he does not descend from Colla Dhá Chríoch.

King Cairbre Daimh Airgid himself is said to have had seven sons.[47] [Vol. II, pp. 20-21] In this subgroup there is representation of only three of these seven sons, which may be due either to insufficient sampling in the Ysearch array or to only these three sons having surviving male line representation. In any case, there is an impression of increased validity of the genealogy from this point down.

Chart 72 shows that there are definite genetic links at the 37-marker level between the Carroll and the pair of Boylans, who represent different sons of King Cairbre Daimh Airgid. Chart 73 demonstrates that the links among the members of this subgroup are strengthened at the 67-marker level, as would be expected on the basis of the distinctive 9-null-22 distinctive triple deviation from the SWAMH in the last 30 markers.

The results charts show that there is an overall similarity in haplotype pattern, with some subclustering. This subclustering would associate the Airghialla surnames as follows: McGuire1; Boylan; McDonald1; McDonald2; Higgins-McMahon; Heaney-Kelly; Callan-Carroll-McGuire2-McKenna. This does not correspond exactly with the subclustering that would be expected on the basis of the separate lines from the three sons, which would be as follows: Carroll-McMahon-Callan-Kelly; Heaney-McGuire; Boylan-Higgins-McKenna-McDonald.

The Carroll-McMahon discrepancy is particularly striking, as they should be quite close in haplotype pattern. The McMahon sample is quite small, though, three including the Matthews, so the modal may only differ from the Carroll modal at three markers instead of seven. The discrepancy may be a function of the general similarity of haplotype pattern among the representatives of most of

these surnames rather than of extensive differences between the Carroll modal and the McMahon modal.

Most of the other discrepancies might be similarly explained. The surnames Heaney, Callan, Higgins, McAulay, Herrington, Walker, Pate and O'Reilly are represented only by a single individual or a pair from the same line, so some differences in surname modal haplotypes could easily become evident with larger sample sizes.

In the case of the Dunphy and Kelly pairs and the modal haplotype pairs each for the McDonalds/McDaniels and the McGuires, the differences in haplotype pattern would seem to reflect differences in descent. That would suggest that there were two Donnchadh, two Ceallach, two Domhnall and two Odhar independent eponyms respectively for these surnames as represented in this subgroup. The two Kellys share values at two markers that deviate from the modal for this subgroup, so their status is somewhat more uncertain. One of the McDonald/McDaniel modals is very near the modal for this subgroup; the other is not. One of the McGuire modals resembles the McAulay and Biggins haplotype patterns while the other differs significantly.

The most secure representation here in terms of genealogical attribution and surname modal haplotype would be that of O'Carroll.

The descendants of three sons appear to be represented here, but the attributions of Callan, McDonald/McDaniel, Higgins, Kelly and McKenna are speculative, so the modal of the subgroup cannot yet be said to be the ancestral haplotype of King Cairbre Daimh Airgid.

It can be said that the modal haplotype of Subgroup O1 is distinctive, and that the bulk of the surnames represented are associated with the Airghialla and that several are associated with medieval kings of the Airghialla. On that basis it can be concluded that this is a modal haplotype of some portion of the Airghialla, and it will be termed for the time being the Airghialla 1 Modal Haplotype.