

Goodrich Family Association Newsletter

Volume 14, Issue 2, page 22

Goodrich Family Association

October 1, 2017

Table of Contents

History of Goodrich Surname Genealogies, Part 2	22-24
Latest Felsham Goodrich Y-SNP Testing Results and Their Genealogical Potential	25
• Y-SNP Test Results	25-33
• Current Status of Felsham Goodrich Within Y-DNA Haplogroup E-V13	33-38
Goodrich Surname DNA Project: September 2017 Update	39
Brief Review of Felsham Goodrich Ancestry from Felsham Wills and Manor Rolls	39
References	40

Visit our website at: www.GoodrichFamilyAssoc.org

Archived past issues: <http://www.goodrichfamilyassoc.org/Newsletters/>

GFA DNA Project: <http://www.goodrichfamilyassoc.org/dna/dnaresults.htm>

Trustees

Matt Goodrich	<i>V.P., GFA and DNA Project Websites</i>	webmaster@goodrichfamilyassoc.org
Steve Goodrich, Ph.D.	<i>DNA Project, Newsletter Editor</i>	sdgoodrich@sbcglobal.net
Michelle Hubenschmidt	<i>Treasurer, Trustee</i>	mzhuby@yahoo.com
Annie Mabry	<i>Trustee</i>	AMabry9739@aol.com
Doug Goodrich	<i>Trustee</i>	d.c.goodrich@att.net
David Goodrich	<i>Emeritus Trustee</i>	dgoodrich@aol.com

History of Goodrich Surname Genealogies, Part 2

~ Editor

The recent finding (*Sep 2016 GFA Quarterly, p 43*),³² in the rolls of Felsham Manor, of what are believed to be Felsham, Suffolk ancestors of the 4 known immigrant descendants bridging the gap from John Goodrich of Felsham (will 30 Nov 1475) to Robert Goodrich of Felsham (1327), provides an occasion for revisiting published genealogies of the Goodrich ancestry.

Most published genealogies of Goodrich surname variants involve descendants of immigrants William Goodrich,^{1, 2, 3, 4, 5, 6, 7} and John Goodrich,^{8, 9, 10, 11} of Wethersfield, Connecticut, and William Goodridge/Goodrich (1609-1645) of Watertown, Massachusetts.^{12, 13, 14, 15, 16} The titled Goodricke family genealogy was produced through a review of herald's visitations of Lincoln, Cambridge, York and other records in the UK.¹⁷ Descendants of immigrant Thomas Goodrich (1615-1679) of Old Rappahannock, Virginia were published recently,¹⁸ and a 6-generation genealogy of Benjamin Goodrick (b. ~1775) of Virginia and Ohio was also published recently.¹⁹ A consideration of these genealogies, with useful features and highlights, continues in this issue.

The Goodridge Genealogy by Edwin Alonzo Goodridge

In the introduction to *The Goodridge Genealogy*, Dr. Edwin Goodridge commented on a possible Saxon origin of the keep of Goodrich Castle (Figure 1), stating that castles were built by Normans and were a novelty to the Saxons. He postulated that the keep of Goodrich Castle was built first separately, as a fortress, by early Saxons predating the Norman Conquest of 1066.²⁰ All surnames in *The Goodridge Genealogy* are spelled Goodridge, including individuals who spelled their surname Goodrich. The biography of Edwin⁸ Alonzo Goodridge, MD follows:²¹

183. EDWIN ALONZO⁸ GOODRIDGE (*Horace*⁷, *Ira*⁶, *Benjamin*⁵, *Benjamin*⁴, *Samuel*³, *Benjamin*², *William*¹) was born in Massena Centre, St. Lawrence County, N. Y., December 26, 1840. His early boyhood days were spent on the farm "On the Hill," but after the family moved to the village of Massena Centre, in 1851, he entered upon his preparatory education and at the same time engaged in such remunerative occupations as offered. At the age of sixteen he began teaching school, and continued at this occupation during winters until prepared for college. The Civil War broke out and he enlisted in Company K, One Hundred and Sixth Regiment, New York Volunteer Infantry, at Canton, N. Y., August 27, 1862. He was in the West Virginia campaign at Harper's Ferry, at Gettysburg, in the pursuit of Lee, and at Mine Run, Va., where he was wounded November 27, 1863. During the winter of 1863-64, he was in the Wolfe Street Hospital, Alexandria, Va., and was discharged for disability April 25, 1864. Returning home, he resumed his studies for a year, taught in a private school in Massena Centre, in 1865, also for two years in the Edge Hill College Preparatory in Princeton, N. J., and was called to teach in the Collegiate School, New York City, in 1867. Before leaving Princeton, the honorary degree of A. M. was given to him by the University, Doctor James McCosh being then president. Among other pleasant experiences at Princeton was his choice by professors in the Theological Seminary and the University to prepare six of their sons for advanced standing in college and also the request of Dr. Guyot, professor of physics in the University, that he should introduce his new physical geography, devoted largely to meteorology and seismic law. While teaching in New York City in 1867, he began his medical studies in the College of Physicians and Surgeons, the medical department of Columbia University. When he was graduated, in 1871, he was the valedictorian of his class. At once he entered upon the practice of medicine, locating in Flushing, N. Y., where he remained until failing health compelled him to retire from active work in May, 1905. He was for ten years a member of the board of education in Flushing, five years its president; ten years visiting physician to the New York Infant Asylum, five years one of its consulting physicians and a member of its board of trustees; visiting surgeon for many years to the Flushing Hospital and some time president of its medical board; member of the Queens County Medical Society, the Associated Physicians of Long Island, the Medical Society of the Greater City of New York, the New York Academy of Medicine, the New York State Medical Society, the American Medical Association, the American Association for the Advancement of Science, the New York State Historical Society, the Niantic, Fireside and Princeton clubs, the Sons of the Revolution and the George Washington Post, G. A. R., of New York City. He died, May 31, 1916. He married, July 26, 1866, ANNA MARGARET FIELD, born in London, England, November 30, 1848, daughter of James and Elizabeth-Mayo (Clark) Field. Her father died in London and she was brought to this country, by her mother, while yet a child. Her education was acquired in the Fort Edward Collegiate Institute, Fort Edward, N. Y., and she was graduated therefrom in the class of 1865. With inclination for social activities and leadership, she was one of the chief supports of her husband in his busy and exacting life. For many years she was a prominent member of The Good Citizenship League and for several years its president. She survived her husband, living in New York City in 1917.

Children:

- 195. i. LEONORA FIELD, b. in New York City April 5, 1868.
- 196. ii. MALCOLM, b. in Flushing, N. Y., Feb. 28, 1873.

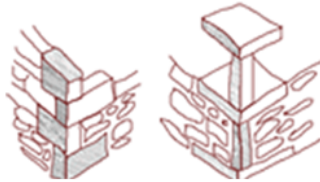
"Whence Came William Goodrich of Watertown" by Merton Taylor Goodrich

Descendant Merton Taylor Goodrich published in 1966 an article revealing that the date and place of birth, and date of death of William¹ Goodridge in *The Goodridge Genealogy* had no supporting evidence. In Woolverstone, Suffolk he found the marriage of William Goodrich and Margaret Butterfield on 19 Aug 1631, baptism of son William on 04 Oct 1632 and his burial on 30 Apr 1633, and baptism of daughter Mary on 21 Aug 1634. Though other Goodrich families near Woolverstone were found, no reliable connection to William¹ Goodridge was established.²² Y-DNA testing (*this issue*) has since proven conclusively the Goodridge-Goodrich connection.

Goodrich Castle: "Saxon" Windows of the Keep



Saxon Windows



Norman
Horizontal vs. Vertical
Stone Pattern



Goodrich Castle: "Norman Addition" (post-1066)

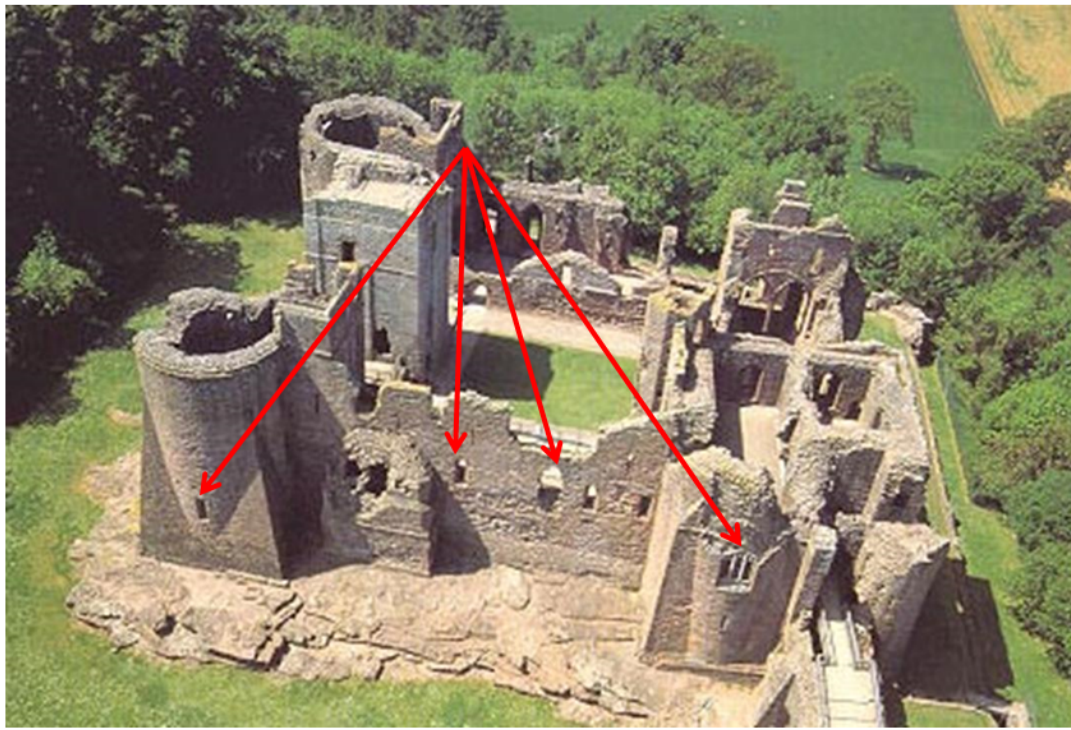


Figure 1: slides 3-4, 2011 Connecticut Gravestone Network Spring Symposium.^{73, 23}

Latest Goodrich Y-SNP Testing Results and Their Genealogical Potential

~ Editor

The major dedicated Goodrich family genealogies published from 1883-1918 likely drew from local vital and church records and from family genealogies solicited and mailed to the compilers, but did not cite any of the sources.^{2, 4, 15} Yet even when multi-family genealogies that included Goodrich were published from 1904-1952 with citations of available sources, gaps in family coverage due to lack of records and/or available individual family histories were still evident.^{5, 7}

A recent advance in Y-DNA testing, next-generation sequencing (NGS), offers the potential of establishing reliable genealogical placements for Goodrich male Y-descendants, who may not have the Goodrich surname currently, in cases where these placements cannot be made with proof records or reliable family histories. Two current testing options are the Family Tree DNA (FTDNA) Big Y test,²⁴ and the Y-Elite 2.1 test offered by Full Genomes Corp (FGC).²⁵

Two more kits in the GFA Y-DNA Project: G77 (*surname Griswold*), G96 (*surname Winters*), both of whom are now proven Y-descendants of Ensign William¹ Goodrich of Wethersfield, CT, took the FTDNA Big Y test in late 2016; their completed test results are shown in Figure 4. Previously, three other kits: G50, a Y-descendant of William¹ Goodridge/Goodrich of Watertown, MA, G62, a Y-descendant of Thomas¹ Goodrich of Old Rappahannock, VA, and G18 (*the Editor*), a Y-descendant of Ensign William¹ Goodrich of Wethersfield, CT, took the FGC Y-Elite 2.0 test in late 2015 (Figure 3), and G18 also took the Big Y test in 2014 (Figure 4).

The Y-SNP markers revealed by Big Y or Y-Elite testing are permanent, irreversible mutations of single Y-chromosome locations, and so are useful in establishing reliably how closely kit owners are related. Mutations at Y-STR markers in Y37, Y67, Y111 testing, conversely, are multi-location repeat sequences which change, bi-directionally, repetitively and unpredictably.

Genealogical Appraisal of FGC Y-Elite 2.0 Y-SNP Data: G50, G62, G18

Descendants of the Felsham Goodrich ancestry belong to Y-DNA haplogroup E-V13, which was the extent of their classification within haplogroup E until the stepwise emergence of NGS testing, first in the form of the FTDNA Walk-Through-The-Y (WTY) test, which in 2012 revealed in G18 the unique Goodrich E-L1019 Y-SNP marker, and later as the NGS Big Y and Y-Elite tests, which revealed in G18 59 (*Y-Elite*) or 37 (*Big Y*) additional Y-SNP markers unique to Felsham Goodrich so far, and the current **Felsham Goodrich haplogroup classification:**

E-V13, E-Z1057, E-CTS5856, E-Z5018, E-Z16242, E-L1019... (59 or 37 total post E-Z16242)

The pre-20th century Y-ancestries of G50, G62 and G18, with available citations,²⁶ and known or estimated birth years, appear in Figure 2. G62, G50, and G18 share Robert Goodrich b. 1505 as most-recent-common ancestor (MRCA); G50 and G18 have MRCA William Goodrich b. 1545.

Robert <i>Will 1563</i> b. ~1505	Adam <i>Will 1597</i> b. ~1536	John <i>Will 1625</i> b. 1568	Thomas¹ <i>WV1</i> b. 1615	Charles² <i>WV17</i> b. 1652	Edward³ <i>WV18</i> b. 1684	Edward⁴ <i>WV22</i> b. 1713	Benjamin⁵ <i>WV22-vi</i> b. 1740	Robert⁶ - b. 1795	Thomas⁷ - b. 1825	Robert⁸ - b. 1846	G62
Robert <i>Will 1563</i> b. ~1505	William I <i>Will 1631</i> b. ~1545	William II <i>HH 551-iii</i> b. 1580	William¹ <i>LWC3896</i> b. 1609	Joseph² <i>LWC3898</i> b. 1639	Phillip³ <i>LWC3904</i> b. 1669	Benjamin⁴ <i>LWC3924</i> b. 1701	Oliver⁵ <i>LWC3969</i> b. 1749	Benjamin⁶ <i>LWC4035</i> b. 1794	George⁷ - b. 1839	John⁸ - b. 1891	G50
Robert <i>Will 1563</i> b. ~1505	William I <i>Will 1631</i> b. ~1545	John <i>Will 1632</i> b. ~1587	William¹ <i>LWC2</i> b. 1622	Ephraim² <i>LWC16</i> b. 1663	William³ <i>LWC47</i> b. 1701	Stephen⁴ <i>LWC136</i> b. 1732	Stephen⁵ <i>LWC392</i> b. 1760	Josiah⁶ <i>LWC1051</i> b. 1793	Stephen⁷ <i>LWC2105</i> b. 1821	Edwin⁸ <i>JR 8-2273</i> b. 1874	G18

Figure 2: Y-Ancestries of Goodrich Surname Y-DNA Project Kits **G62**, **G50** and **G18**.

KIT ID	G-18				G-50				G-62			
	Immigrant William-1 Goodrich (b. 1622)				Immigrant William-1 Goodridge (b. 1609)				Immigrant Thomas-1 Goodrich (b. 1615)			
	Y-Elite 2.0 7YZ53 (2016 - YF05423)				Y-Elite 2.0 8YQRA (2016 - YF05422)				Y-Elite 2.0 N2L2C (2016 - YF05421)			
	TYPE	b37 SITE	SNP NAME	ALLELE	TYPE	b37 SITE	SNP NAME	ALLELE	TYPE	b37 SITE	SNP NAME	ALLELE
UNIQUE SNPs INDELS	SNP	8885865	E-F1449	G	SNP	5059467	E-FGC44078	T	SNP	22306667	E-FGC44202	G
	SNP	14830868	E-FGC14559	T	SNP	5637567	E-FGC44079	C	SNP	3980131	E-FGC45642	T
	SNP	19422643	E-FGC14564	A	SNP	6349917	E-FGC44081	C	SNP	4619419	E-FGC45643	C
	SNP	21389181	E-FGC14566	A	SNP	7016165	E-FGC44082	A	SNP	21158079	E-FGC45646	T
	SNP	22271888	E-FGC14569	A	SNP	7995777	E-FGC44083	T	SNP	21284099	E-FGC45647	C
	INDEL	8889687	E-FGC14573	T	SNP	9538183	E-FGC44084	A	SNP	58858916	E-FGC45648	C
	SNP	5377030	E-FGC19305	C	SNP	15669316	E-FGC44085	T				
	SNP	6756739	E-FGC19306	C	SNP	18259243	E-FGC44086	T				
	SNP	13934206	E-FGC19307	A	SNP	22366620	E-FGC44093	A				
	SNP	14356386	E-FGC19308	G								
SNP	22251892	E-FGC19316	T									
POST E-Z16242	SNP	24359934		C	SNP	24359934		C	SNP	24359934		C
	SNP	59022718		G	SNP	59022718		G	SNP	59022718		G
	SNP	24070838	E-A15210	A	SNP	24070838	E-A15210	A	SNP	24070838	E-A15210	A
	SNP	16744514	E-BY5246	A	SNP	16744514	E-BY5246	A	SNP	16744514	E-BY5246	A
	SNP	22266987	E-BY5263	G	SNP	22266987	E-BY5263	G	SNP	22266987	E-BY5263	G
	SNP	4582274	E-FGC14554	T	SNP	4582274	E-FGC14554	T	SNP	4582274	E-FGC14554	T
	SNP	7893270	E-FGC14555	A	SNP	7893270	E-FGC14555	A	SNP	7893270	E-FGC14555	A
	SNP	9053762	E-FGC14556	A	SNP	9053762	E-FGC14556	A	SNP	9053762	E-FGC14556	A
	SNP	14023870	E-FGC14557	G	SNP	14023870	E-FGC14557	G	SNP	14023870	E-FGC14557	G
	SNP	14707072	E-FGC14558	A	SNP	14707072	E-FGC14558	A	SNP	14707072	E-FGC14558	A
	SNP	16333108	E-FGC14560	C	SNP	16333108	E-FGC14560	C	SNP	16333108	E-FGC14560	C
	SNP	17132701	E-FGC14561	A	SNP	17132701	E-FGC14561	A	SNP	17132701	E-FGC14561	A
	SNP	19108424	E-FGC14562	C	SNP	19108424	E-FGC14562	C	SNP	19108424	E-FGC14562	C
	SNP	19366454	E-FGC14563	C	SNP	19366454	E-FGC14563	C	SNP	19366454	E-FGC14563	C
	SNP	21174115	E-FGC14565	A	SNP	21174115	E-FGC14565	A	SNP	21174115	E-FGC14565	A
	SNP	22074508	E-FGC14567	C	SNP	22074508	E-FGC14567	C	SNP	22074508	E-FGC14567	C
	SNP	22271719	E-FGC14568	C	SNP	22271719	E-FGC14568	C	SNP	22271719	E-FGC14568	C
	SNP	23371553	E-FGC14570	A	SNP	23371553	E-FGC14570	A	SNP	23371553	E-FGC14570	A
	SNP	23626209	E-FGC14571	A	SNP	23626209	E-FGC14571	A	SNP	23626209	E-FGC14571	A
	SNP	23634049	E-FGC14572	C	SNP	23634049	E-FGC14572	C	SNP	23634049	E-FGC14572	C
	INDEL	21259268	E-FGC14574	CAA	INDEL	21259268	E-FGC14574	CAA	INDEL	21259268	E-FGC14574	CAA
	SNP	17612228	E-FGC19295	A	SNP	17612228	E-FGC19295	A	SNP	17612228	E-FGC19295	A
	SNP	2984547	E-FGC19296	G	SNP	2984547	E-FGC19296	G	SNP	2984547	E-FGC19296	G
	SNP	3025867	E-FGC19297	A	SNP	3025867	E-FGC19297	A	SNP	3025867	E-FGC19297	A
	SNP	3687000	E-FGC19298	C	SNP	3687000	E-FGC19298	C	SNP	3687000	E-FGC19298	C
	SNP	3710670	E-FGC19299	C	SNP	3710670	E-FGC19299	C	SNP	3710670	E-FGC19299	C
	SNP	3750510	E-FGC19300	G	SNP	3750510	E-FGC19300	G	SNP	3750510	E-FGC19300	G
	SNP	4674268	E-FGC19301	T	SNP	4674268	E-FGC19301	T	SNP	4674268	E-FGC19301	T
	SNP	4793875	E-FGC19302	C	SNP	4793875	E-FGC19302	C	(SNP)	4793875	E-FGC19302	C
	SNP	4853258	E-FGC19303	A	SNP	4853258	E-FGC19303	A	SNP	4853258	E-FGC19303	A
	SNP	5146660	E-FGC19304	G	SNP	5146660	E-FGC19304	G	SNP	5146660	E-FGC19304	G
	SNP	16471392	E-FGC19309	G	SNP	16471392	E-FGC19309	G	SNP	16471392	E-FGC19309	G
	SNP	16771119	E-FGC19310	G	SNP	16771119	E-FGC19310	G	SNP	16771119	E-FGC19310	G
	SNP	18848871	E-FGC19313	C	SNP	18848871	E-FGC19313	C	SNP	18848871	E-FGC19313	C
	SNP	19530506	E-FGC19314	C	SNP	19530506	E-FGC19314	C	SNP	19530506	E-FGC19314	C
	SNP	21219664	E-FGC19315	A	SNP	21219664	E-FGC19315	A	SNP	21219664	E-FGC19315	A
	INDEL	5804472	E-FGC19318	GTITTTTT	INDEL	5804472	E-FGC19318	GTITTTTT	INDEL	5804472	E-FGC19318	GTITTTTT
	SNP	23819893	E-FGC22107	G	SNP	23819893	E-FGC22107	G	SNP	23819893	E-FGC22107	G
	SNP	13719565	E-FGC35517	A	SNP	13719565	E-FGC35517	A	SNP	13719565	E-FGC35517	A
	SNP	27535216	E-FGC39184	T	SNP	27535216	E-FGC39184	T	SNP	27535216	E-FGC39184	T
SNP	22275831	E-FGC44089	G	SNP	22275831	E-FGC44089	G	SNP	22275831	E-FGC44089	G	
SNP	22312481	E-FGC44090	G	SNP	22312481	E-FGC44090	G	SNP	22312481	E-FGC44090	G	
SNP	22334482	E-FGC44091	G	SNP	22334482	E-FGC44091	G	(SNP)	22334482	E-FGC44091	G	
SNP	16638752	E-L1019	C	SNP	16638752	E-L1019	C	SNP	16638752	E-L1019	C	
SNP	24359934	E-Y20431	C	SNP	24359934	E-Y20431	C	SNP	24359934	E-Y20431	C	
SNP	16744514	E-YFS153872	A	SNP	16744514	E-YFS153872	A	SNP	16744514	E-YFS153872	A	
SNP	13871421	E-YFS287746	T	SNP	13871421	E-YFS287746	T	SNP	13871421	E-YFS287746	T	
SNP	19387451	E-YFS28777	T	SNP	19387451	E-YFS28777	T	(SNP)	19387451	E-YFS28777	T	
E-V13 to E-Z16242	SNP	8442728	E-Z16242	T	SNP	8442728	E-Z16242	T	SNP	8442728	E-Z16242	T
	SNP	28713760	E-Z5018	T	SNP	28713760	E-Z5018	T	SNP	28713760	E-Z5018	T
	SNP	16509525	E-CTS5856	A	SNP	16509525	E-CTS5856	A	SNP	16509525	E-CTS5856	A
	SNP	18222429	E-Z1057	T	SNP	18222429	E-Z1057	T	SNP	18222429	E-Z1057	T
E-M96 to E-L618 SHARED MAJOR BRANCH SNPs	SNP	6842263	E-V13	A	SNP	6842263	E-V13	A	SNP	6842263	E-V13	A
	SNP	15339697	E-L618	C	SNP	15339697	E-L618	C	SNP	15339697	E-L618	C
	SNP	15499572	E-Z1919	A	SNP	15499572	E-Z1919	A	SNP	15499572	E-Z1919	A
	SNP	21893303	E-M78	T	SNP	21893303	E-M78	T	SNP	21893303	E-M78	T
	SNP	17664771	E-V68	C	SNP	17664771	E-V68	C	SNP	17664771	E-V68	C
	SNP	21741703	E-M35.1	C	SNP	21741703	E-M35.1	C	SNP	21741703	E-M35.1	C
	SNP	15467824	E-M215	G	SNP	15467824	E-M215	G	SNP	15467824	E-M215	G
	SNP	21610831	E-P2	A	SNP	21610831	E-P2	A	SNP	21610831	E-P2	A
	SNP	14159846	E-P177	T	SNP	14159846	E-P177	T	SNP	14159846	E-P177	T
	SNP	21083420	E-P147	A	SNP	21083420	E-P147	A	SNP	21083420	E-P147	A
SNP	21778998	E-M96 (E)	G	SNP	21778998	E-M96 (E)	G	SNP	21778998	E-M96 (E)	G	

Figure 3: SNP, INDEL results for Y-Elite 2.0 kits:

- 7YZ53 = G18 (Y-descendant of William¹ Goodrich of Wethersfield, CT; YF05423 in YFull tree),²⁷
- 8YQRA = G50 (Y-descendant of William¹ Goodridge of Watertown, MA; YF05422 in YFull tree),
- N2L2C = G62 (Y-descendant of Thomas¹ Goodrich of Old Rappahannock, VA; YF05421 in YFull tree).

KIT ID	G-18 (GOODRICH)				G-96 (WINTERS)				G-77 (GRISWOLD)			
	Immigrant William-1 Goodrich (b. 1622)				Immigrant William-1 Goodrich (b. 1622)				Immigrant William-1 Goodrich (b. 1622)			
	Big Y 89943 (YF01646)				Big Y B79136 (YF07585)				Big Y 349005 (YF08970)			
	TYPE	b37 SITE	SNP NAME	ALLELE	TYPE	b37 SITE	SNP NAME	ALLELE	TYPE	b37 SITE	SNP NAME	ALLELE
UNIQUE SNPs INDELS	SNP	14830868	E-FGC14559	T	SNP	22420098	E-A11430	C	SNP	14794476	E-FGC63180	A
	SNP	19422643	E-FGC14564	A	SNP	8109742	E-F4092	C	SNP	2694375	YFS3405715	T
	SNP	21389181	E-FGC14566	A	SNP	14088447	E-FGC61650	G	SNP	6654535	YFS3405731	T
	SNP	22271888	E-FGC14569	A	SNP	19208783	E-FGC61651	A	SNP	7282395	YFS3405734	A
	SNP	22251892	E-FGC19316	T	SNP	21292720	E-FGC61652	C	SNP	22615899	YFS3406162	T
	INDEL	15948221	E-FGC61654	G								
ENSGN WILLIAM	SNP	8885865	E-F1449	G	SNP	8885865	E-F1449	G	SNP	8885865	E-F1449	G
	INDEL	8889687	E-FGC14573	T	INDEL	8889687	E-FGC14573	T	INDEL	8889687	E-FGC14573	T
POST E-Z16242	SNP	24359934		C	SNP	24359934		C	SNP	24359934		C
	(SNP)	59022718		G	(SNP)	59022718		G	(SNP)	59022718		G
	SNP	24070838	E-A15210	A	SNP	24070838	E-A15210	A	SNP	24070838	E-A15210	A
	SNP	16744514	E-BY5246	A	SNP	16744514	E-BY5246	A	SNP	16744514	E-BY5246	A
	SNP	22266987	E-BY5263	G	SNP	22266987	E-BY5263	G	SNP	22266987	E-BY5263	G
	(SNP)	4582274	E-FGC14554	T	(SNP)	4582274	E-FGC14554	T	(SNP)	4582274	E-FGC14554	T
	SNP	7893270	E-FGC14555	A	SNP	7893270	E-FGC14555	A	SNP	7893270	E-FGC14555	A
	SNP	9053762	E-FGC14556	A	SNP	9053762	E-FGC14556	A	SNP	9053762	E-FGC14556	A
	SNP	14023870	E-FGC14557	G	SNP	14023870	E-FGC14557	G	SNP	14023870	E-FGC14557	G
	SNP	14707072	E-FGC14558	A	SNP	14707072	E-FGC14558	A	SNP	14707072	E-FGC14558	A
	SNP	16333108	E-FGC14560	C	SNP	16333108	E-FGC14560	C	SNP	16333108	E-FGC14560	C
	SNP	17132701	E-FGC14561	A	SNP	17132701	E-FGC14561	A	SNP	17132701	E-FGC14561	A
	SNP	19108424	E-FGC14562	C	SNP	19108424	E-FGC14562	C	SNP	19108424	E-FGC14562	C
	SNP	19366454	E-FGC14563	C	SNP	19366454	E-FGC14563	C	SNP	19366454	E-FGC14563	C
	SNP	21174115	E-FGC14565	A	SNP	21174115	E-FGC14565	A	SNP	21174115	E-FGC14565	A
	SNP	22074508	E-FGC14567	C	SNP	22074508	E-FGC14567	C	SNP	22074508	E-FGC14567	C
	SNP	22271719	E-FGC14568	C	SNP	22271719	E-FGC14568	C	SNP	22271719	E-FGC14568	C
	SNP	23371553	E-FGC14570	A	SNP	23371553	E-FGC14570	A	SNP	23371553	E-FGC14570	A
	SNP	23626209	E-FGC14571	A	SNP	23626209	E-FGC14571	A	SNP	23626209	E-FGC14571	A
	SNP	23634049	E-FGC14572	C	SNP	23634049	E-FGC14572	C	SNP	23634049	E-FGC14572	C
	SNP	17612228	E-FGC19295	A	SNP	17612228	E-FGC19295	A	SNP	17612228	E-FGC19295	A
	SNP	16771119	E-FGC19310	G	SNP	16771119	E-FGC19310	G	SNP	16771119	E-FGC19310	G
	SNP	21219664	E-FGC19315	A	SNP	21219664	E-FGC19315	A	SNP	21219664	E-FGC19315	A
	SNP	23819893	E-FGC22107	G	SNP	23819893	E-FGC22107	G	SNP	23819893	E-FGC22107	G
SNP	13719565	E-FGC35517	A	SNP	13719565	E-FGC35517	A	SNP	13719565	E-FGC35517	A	
(SNP)	22275831	E-FGC44089	G	(SNP)	22275831	E-FGC44089	G	(SNP)	22275831	E-FGC44089	G	
SNP	22312481	E-FGC44090	G	SNP	22312481	E-FGC44090	G	SNP	22312481	E-FGC44090	G	
SNP	16638752	E-L1019	C	SNP	16638752	E-L1019	C	SNP	16638752	E-L1019	C	
SNP	24359934	E-Y20431	C	SNP	24359934	E-Y20431	C	SNP	24359934	E-Y20431	C	
SNP	16744514	E-YFS153872	A	SNP	16744514	E-YFS153872	A	SNP	16744514	E-YFS153872	A	
E-V13 to E-Z16242	SNP	8442728	E-Z16242	T	SNP	8442728	E-Z16242	T	SNP	8442728	E-Z16242	T
	(SNP)	28713760	E-Z5018	T	(SNP)	28713760	E-Z5018	T	(SNP)	28713760	E-Z5018	T
SNP	16509525	E-CTS5856	A	SNP	16509525	E-CTS5856	A	SNP	16509525	E-CTS5856	A	
SNP	18222429	E-Z1057	T	SNP	18222429	E-Z1057	T	SNP	18222429	E-Z1057	T	
SNP	6842263	E-V13	A	SNP	6842263	E-V13	A	SNP	6842263	E-V13	A	
SNP	15339697	E-L618	C	SNP	15339697	E-L618	C	SNP	15339697	E-L618	C	
+	15499572	E-Z1919	A	SNP	15499572	E-Z1919	A	SNP	15499572	E-Z1919	A	
+	21893303	E-M78	T	SNP	21893303	E-M78	T	SNP	21893303	E-M78	T	
+	17664771	E-V68	C	SNP	17664771	E-V68	C	SNP	17664771	E-V68	C	
+	21741703	E-M35.1	C	SNP	21741703	E-M35.1	C	SNP	21741703	E-M35.1	C	
+	15467824	E-M215	G	SNP	15467824	E-M215	G	SNP	15467824	E-M215	G	
+	21610831	E-P2	A	SNP	21610831	E-P2	A	SNP	21610831	E-P2	A	
+	14159846	E-P177	T	SNP	14159846	E-P177	T	SNP	14159846	E-P177	T	
+	21083420	E-P147	A	SNP	21083420	E-P147	A	SNP	21083420	E-P147	A	
+	21778998	E-M96 (E)	G	SNP	21778998	E-M96 (E)	G	SNP	21778998	E-M96 (E)	G	

Figure 4: SNP, INDEL results for Big Y kits sharing SNP **E-F1449**, INDEL **FGC14573** not shared with G50, G62:

- 89943 = G18; surname Goodrich (*YF01646* in *YFull tree*),²⁷
- B79136 = G96; surname Winters (*YF07585* in *YFull tree*),
- 349005 = G77; surname Griswold (*YF08970* in *YFull tree*).

Given the ancestries in Figure 2, if any Y-SNP mutation in G62, G50 and G18 occurred from:

- 1505-1535, it occurred in Robert Goodrich b. 1505 only, and is shared by G62, G50 and G18.
- 1536-1544, it was in Adam Goodrich b. 1536 (G62), or it was in Robert Goodrich b. 1505 (G50, G18).
 - G62 starts a unique Y-SNP mutation set in 1536 (known average spacing between generations = 36 years).
- 1545-1579 was in William Goodrich I b. 1545 (shared by G50, G18).
- 1580-1586 was in William Goodrich I b. 1545 (G18), or it was in William Goodrich II (G50).
 - G50 (avg. space 37 years) and G18 (avg. space 34 years) start separate, unique Y-SNP mutation sets in 1580.

An iterative Excel technique was utilized to attempt to estimate in which generations of the G18, G50 and G62 ancestries their 11, 9, or 6 Y-Elite 2.0 (SNP + INDEL) mutations, respectively, most likely occurred, if a constant average spacing between the mutations is calculated and used (*it is understood, however, that SNP mutations occur spontaneously and are not necessarily equally spaced*). For each ancestry, the iterative technique was performed in three ways:

- **A Range**
 - The first mutation was set at 1536 (G62) or 1580 (G18 and G50).
 - For G62, the first iterative average mutation spacing is $(2015-1536) \div 7 = 68.4$ years.
 - For G50, the first iterative average mutation spacing is $(2015-1580) \div 9 = 48.3$ years.
 - For G18, the first iterative average mutation spacing is $(2015-1580) \div 11 = 39.5$ years.
 - (G18 example): 1 space before each of the other 10 mutations + 1 space after 10th; total 11.
 - The first MUTATION is then set at 1537 (G62) or 1581 (G18 and G50).
 - For G62, the second iterative average mutation spacing is $(2015-1537) \div 7 = 68.3$ years.
 - For G50, the second iterative average mutation spacing is $(2015-1581) \div 9 = 48.2$ years.
 - For G18, the second iterative average mutation spacing is $(2015-1581) \div 11 = 39.5$ years.
 - Repeat until (1st mutation year – average mutation spacing) = 1536 (G62) or 1580 (G18, G50)
- **B Range**
 - The last mutation was set at 2015 for G62, G18 and G50.
 - For G62, the first iterative average mutation spacing is $(2015-1536) \div 7 = 68.4$ years.
 - For G50, the first iterative average mutation spacing is $(2015-1580) \div 9 = 48.3$ years.
 - For G18, the first iterative average mutation spacing is $(2015-1580) \div 11 = 39.5$ years.
 - The last mutation is then set at 2014 for G62, G18 and G50.
 - For G62, the second iterative average mutation spacing is $(2014-1536) \div 7 = 68.3$ years.
 - For G50, the second iterative average mutation spacing is $(2014-1580) \div 9 = 48.2$ years.
 - For G18, the second iterative average mutation spacing is $(2014-1580) \div 11 = 39.5$ years.
 - Repeat until (last mutation year + average mutation spacing) = 2015 for G62, G18 and G50.
- **C Range**
 - Set last mutation at 2015 for all, and set 1st mutation at 1536 for G62 or at 1580 for G18 and G50.
 - For G62, the first iterative average mutation spacing is $(2015-1536) \div 6 = 79.8$ years.
 - For G50, the first iterative average mutation spacing is $(2015-1580) \div 8 = 54.4$ years.
 - For G18, the first iterative average mutation spacing is $(2015-1580) \div 10 = 43.5$ years.
 - Set last mutation at 2014 for all, and set 1st mutation at 1537 for G62 or at 1581 for G18 and G50.
 - For G62, the second iterative average mutation spacing is $(2014-1537) \div 6 = 79.5$ years.
 - For G50, the second iterative average mutation spacing is $(2014-1581) \div 8 = 54.1$ years.
 - For G18, the second iterative average mutation spacing is $(2014-1581) \div 10 = 43.3$ years.
 - Repeat until (last mutation year + average mutation spacing) = 2015 for G62, G18 and G50.

The A, B, C-Range procedure is demonstrated for the Y-Elite 2.0 results of G18 in Figures 5-7, and result summaries only for Y-Elite 2.0 tests of G18 and G50 are then compared in Figure 8. In Figure 9, result summaries for the Big Y test of G18 and Y-Elite 2.0 test of G62 are compared. For uncertain reasons, G18 and G50 had a similar number of Y-Elite 2.0 mutations, but G62 had fewer mutations than G18 had in his Big Y test. Age of tester, higher than ~80 years, could be a factor. In any event, the Y-Elite 2.0 test in particular may be capable of producing a detectable SNP or INDEL in almost every generation of the G18, G50 ancestries, with about 2 gaps. Acquiring SNP tests of known ancestral lines enables placement of a kit with unknown ancestry.

1580	William I 1545	1585.0	William I 1545	1608	John 1587
1619.5	John 1587	39.1	John 1587	1645.0	William-1 1621.4
1659.1	William-1 1621.4	1624.1	William-1 1621.4	1682.0	Ephraim-2 1662.7
1698.6	Ephraim-2 1662.7	1663.2	Ephraim-2 1662.7	1719.0	William-3 1701.0
39.5	William-3 1701.0	1702.3	William-3 1701.0	1756.0	Stephen-4 1731.6
1738.2	Stephen-4 1731.6	1741.4	Stephen-4 1731.6	37.0	Stephen-5 1760.2
1777.7	Stephen-5 1760.2	1780.5	Stephen-5 1760.2	1793.0	Josiah-6 1792.9
1817.3	Josiah-6 1792.9	1819.5	Josiah-6 1792.9	1830.0	Stephen-7 1821.0
1856.8	Stephen-7 1821.0	1858.6	Stephen-7 1821.0	1867.0	Stephen-7 1821.0
1896.4	Gen 8 1873.5	1897.7	Gen 8 1873.5	1904.0	Gen 8 1873.5
39.5	Gen 9 1907.1	39.1	Gen 9 1907.1	37.0	Gen 9 1907.1
1935.9	Gen 10 1928.9	1936.8	Gen 10 1928.9	1941.0	Gen 10 1928.9
1975.5	Gen 11 1962.2 G18	1975.9	Gen 11 1962.2 G18	1978.0	Gen 11 1962.2 G18
1582	William I 1545	1587.0	John 1587	1615	John 1587
39.4	John 1587	1625.9	William-1 1621.4	1651.4	William-1 1621.4
1621.4	William-1 1621.4	1664.8	Ephraim-2 1662.7	1687.7	Ephraim-2 1662.7
1660.7	William-1 1621.4	1703.7	William-3 1701.0	1724.1	William-3 1701.0
1700.1	Ephraim-2 1662.7	1742.6	Stephen-4 1731.6	36.4	Stephen-4 1731.6
39.4	William-3 1701.0	1781.5	Stephen-5 1760.2	1760.5	Stephen-5 1760.2
1739.5	Stephen-4 1731.6	1820.5	Josiah-6 1792.9	1796.8	Josiah-6 1792.9
1778.8	Stephen-5 1760.2	1859.4	Stephen-7 1821.0	1833.2	Stephen-7 1821.0
1818.2	Josiah-6 1792.9	1898.3	Gen 8 1873.5	1869.5	Stephen-7 1821.0
1857.5	Stephen-7 1821.0	38.9	Gen 9 1907.1	1905.9	Gen 8 1873.5
1896.9	Gen 8 1873.5	1937.2	Gen 10 1928.9	36.4	Gen 9 1907.1
39.4	Gen 9 1907.1	1976.1	Gen 11 1962.2 G18	1942.3	Gen 10 1928.9
1936.3	Gen 10 1928.9			1978.6	Gen 11 1962.2 G18
1975.6	Gen 11 1962.2 G18				
1584	William I 1545	1589.0	John 1587	1616	John 1587
39.2	John 1587	1627.7	William-1 1621.4	1652.3	William-1 1621.4
1623.2	William-1 1621.4	1666.5	Ephraim-2 1662.7	1688.5	Ephraim-2 1662.7
1662.4	William-1 1621.4	1705.2	William-3 1701.0	1724.8	William-3 1701.0
39.2	Ephraim-2 1662.7	1743.9	Stephen-4 1731.6	36.3	Stephen-4 1731.6
1701.5	William-3 1701.0	1782.6	Stephen-5 1760.2	1761.1	Stephen-5 1760.2
1740.7	Stephen-4 1731.6	38.7	Josiah-6 1792.9	1797.4	Josiah-6 1792.9
1779.9	Stephen-5 1760.2	1821.4	Stephen-7 1821.0	1833.6	Stephen-7 1821.0
1819.1	Josiah-6 1792.9	1860.1	Stephen-7 1821.0	1869.9	Stephen-7 1821.0
1858.3	Stephen-7 1821.0	1898.8	Gen 8 1873.5	1906.2	Gen 8 1873.5
1897.5	Gen 8 1873.5	38.7	Gen 9 1907.1	36.3	Gen 9 1907.1
39.2	Gen 9 1907.1	1937.5	Gen 10 1928.9	1942.5	Gen 10 1928.9
1936.6	Gen 10 1928.9	1976.3	Gen 11 1962.2 G18	1978.7	Gen 11 1962.2 G18
1975.8	Gen 11 1962.2 G18				
1975.8	Gen 11 1962.2 G18				

A-Range	Years	William I	John	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	Gen 10	G-18	
Birth year		~1545	~1587	1622	1663	1701	1732	1760	1793	1821	1874	1907	1929	1962	
1580-1581	2	1	1	1	1		1	1	1	1	1		1	1	11
1582-1583	2	1		2	1		1	1	1	1	1		1	1	11
1584	2	1		2		1	1	1	1	1	1		1	1	11
1585-1586	1	1		1	1	1	1	1	1	1	1		1	1	11
1587-1588	2		1	1	1	1	1	1	1	1	1		1	1	11
1589-1607	19		1	1	1	1	1	1		2	1		1	1	11
1608-1614	2		1	1	1	1	1		1	2	1		1	1	11
1615-1616	5		1	1	1	1		1	1	2	1		1	1	11
Years with SNP		7	30	35	33	31	30	33	16	35	35	0	35	35	

Figure 5: Unique arrangements (A-Range) of unique SNPs by generation for the 2015 Y-Elite 2.0 test of G-18 if:

- **First unique SNP occurred in 1580** with 11 average intervals before, between, after the other 10 SNPs to 2015.
- Then iteratively the first SNP is set to the next year (1581, 1582...) and the other 10 SNPs are spaced similarly.
 - Until last **shared SNP** occurs in **1579.7**, after which an impossible 12th unique SNP could occur after 1580.
- In the first iteration, the average spacing is $(2015-1580) \div 11 = 39.5$ years; the overall average is 37.9 years.

1619.5	John ~1587	1617.8	John ~1587		
1659.1	William-1 1621.4	1655.6	William-1 1621.4		
1698.6	Ephraim-2 1662.7	1693.5	Ephraim-2 1662.7		
39.5	William-3 1701.0	1731.3	William-3 1701.0		
1738.2	Stephen-4 1731.6	37.8	Stephen-4 1731.6		
1777.7	Stephen-5 1760.2	1769.1	Stephen-5 1760.2		
1817.3	Josiah-6 1792.9	1806.9	Josiah-6 1792.9		
1856.8	Stephen-7 1821.0	1844.7	Stephen-7 1821.0		
1896.4	Gen 8 1873.5	1882.5	Gen 8 1873.5		
39.5	Gen 9 1907.1	1920.4	Gen 9 1907.1		
1935.9	Gen 10 1928.9	1958.2	Gen 10 1928.9		
1975.5	Gen 11 1962.2 G18	1996.0	Gen 11 1962.2 G18		
2015.0	Gen 11 1962.2 G18				
1618.7	John ~1587	1616.6	John ~1587		
1657.5	William-1 1621.4	1653.3	William-1 1621.4		
1696.2	Ephraim-2 1662.7	1689.9	Ephraim-2 1662.7		
38.7	William-3 1701.0	1726.5	William-3 1701.0		
1734.9	Stephen-4 1731.6	36.6	Stephen-4 1731.6		
1773.6	Stephen-5 1760.2	1763.2	Stephen-5 1760.2		
1812.4	Josiah-6 1792.9	1799.8	Josiah-6 1792.9		
1851.1	Stephen-7 1821.0	1836.5	Stephen-7 1821.0		
1889.8	Gen 8 1873.5	1873.1	Stephen-7 1821.0		
1928.5	Gen 9 1907.1	36.6	Gen 8 1873.5		
38.7	Gen 10 1928.9	1909.7	Gen 9 1907.1		
1967.3	Gen 11 1962.2 G18	1946.4	Gen 10 1928.9		
2006.0	Gen 11 1962.2 G18	1983.0	Gen 11 1962.2 G18		
1618.2	John ~1587	1616.4	John ~1587		
1656.4	William-1 1621.4	1652.7	William-1 1621.4		
1694.5	Ephraim-2 1662.7	1689.1	Ephraim-2 1662.7		
38.2	William-3 1701.0	1725.5	William-3 1701.0		
1732.7	Stephen-4 1731.6	36.4	Stephen-4 1731.6		
1770.9	Stephen-5 1760.2	1761.8	Stephen-5 1760.2		
1809.1	Josiah-6 1792.9	1798.2	Josiah-6 1792.9		
1847.3	Stephen-7 1821.0	1834.5	Stephen-7 1821.0		
1885.5	Gen 8 1873.5	1870.9	Stephen-7 1821.0		
1923.6	Gen 9 1907.1	36.4	Gen 8 1873.5		
1961.8	Gen 10 1928.9	1907.3	Gen 9 1907.1		
2000.0	Gen 11 1962.2 G18	1943.6	Gen 10 1928.9		
		1980.0	Gen 11 1962.2 G18		

B-Range	Years	William I	John	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	Gen 10	G-18
Birth year		~1545	~1587	1622	1663	1701	1732	1760	1793	1821	1874	1907	1929	1962
1980-1983	4		1	1	1	1		1	1	2		1	1	1
1984-1996	13		1	1	1	1		1	1	1	1	1	1	1
1997-2000	4		1	1	1		1	1	1	1	1	1	1	1
2001-2006	6		1	1	1		1	1	1	1	1			2
2007-2015	9		1	1	1		1	1	1	1	1		1	2
Years with SNP		0	36	36	36	17	19	36	36	36	32	27	30	36

Figure 6: Unique arrangements (B-Range) of unique SNPs by generation for the 2015 Y-Elite 2.0 test of G-18 if:

- **Last unique SNP occurred in 2015** with 11 average intervals before, between, after the other 10 SNPs to 1580.
- Then iteratively last SNP is set to the preceding year (2014, 2013...) and the other 10 SNPs are spaced similarly.
 - Until last unique SNP occurs in 1980, since an impossible 12th unique SNP could occur in 1979 + 36 = 2015.
- In the first iteration, the average spacing is $(2015-1580) \div 11 = 39.5$ years; the overall average is 37.8 years.

1580	William I ~1545	1608	John ~1587		
43.5	John ~1587	1645.9	William-1 1621.4		
1623.5	William-1 1621.4	1683.8	Ephraim-2 1662.7		
1667.0	Ephraim-2 1662.7	1721.7	William-3 1701.0		
1710.5	William-3 1701.0	1759.6	Stephen-4 1731.6		
1754.0	Stephen-4 1731.6	37.9	Stephen-5 1760.2		
43.5	Stephen-5 1760.2	1797.5	Josiah-6 1792.9		
1797.5	Josiah-6 1792.9	1835.4	Stephen-7 1821.0		
1841.0	Stephen-7 1821.0	1873.3	Stephen-7 1821.0		
1884.5	Gen 8 1873.5	37.9	Gen 8 1873.5		
1928.0	Gen 9 1907.1	1911.2	Gen 9 1907.1		
43.5	Gen 10 1928.9	1949.1	Gen 10 1928.9		
1971.5	Gen 11 1962.2 G18	1987	Gen 11 1962.2 G18		
2015	Gen 11 1962.2 G18				
1587	John ~1587	1611	John ~1587		
1629.1	William-1 1621.4	1648.3	William-1 1621.4		
1671.2	Ephraim-2 1662.7	1685.6	Ephraim-2 1662.7		
1713.3	William-3 1701.0	1722.9	William-3 1701.0		
1755.4	Stephen-4 1731.6	37.3	Stephen-4 1731.6		
42.1	Stephen-5 1760.2	1760.2	Stephen-5 1760.2		
1797.5	Josiah-6 1792.9	1797.5	Josiah-6 1792.9		
1839.6	Stephen-7 1821.0	1834.8	Stephen-7 1821.0		
1881.7	Gen 8 1873.5	1872.1	Stephen-7 1821.0		
1923.8	Gen 9 1907.1	37.3	Gen 8 1873.5		
42.1	Gen 10 1928.9	1909.4	Gen 9 1907.1		
1965.9	Gen 11 1962.2 G18	1946.7	Gen 10 1928.9		
2008	Gen 11 1962.2 G18	1984	Gen 11 1962.2 G18		
1592	John ~1587	1615	John ~1587		
1633.1	William-1 1621.4	1651.5	William-1 1621.4		
1674.2	Ephraim-2 1662.7	1688.0	Ephraim-2 1662.7		
1715.3	William-3 1701.0	1724.5	William-3 1701.0		
1756.4	Stephen-4 1731.6	36.5	Stephen-4 1731.6		
41.1	Stephen-5 1760.2	1761.0	Stephen-5 1760.2		
1797.5	Josiah-6 1792.9	1797.5	Josiah-6 1792.9		
1838.6	Stephen-7 1821.0	1834.0	Stephen-7 1821.0		
1879.7	Gen 8 1873.5	1870.5	Stephen-7 1821.0		
1920.8	Gen 9 1907.1	1907.0	Gen 8 1873.5		
1961.9	Gen 10 1928.9	36.5	Gen 9 1907.1		
2003	Gen 11 1962.2 G18	1943.5	Gen 10 1928.9		
		1980	Gen 11 1962.2 G18		

C-Range	Years	William I ~1545	John ~1587	Gen 1 1622	Gen 2 1663	Gen 3 1701	Gen 4 1732	Gen 5 1760	Gen 6 1793	Gen 7 1821	Gen 8 1874	Gen 9 1907	Gen 10 1929	G-18 1962
1580-1586	7	1		1	1	1	1		1	1	1	1		2
1587-1591	5		1	1	1	1	1		1	1	1	1		2
1592-1608	17		1	1	1	1	1		1	1	1	1	1	1
1609-1610	2		1	1	1	1	1		1	2		1	1	1
1611-1614	4		1	1	1	1		1	1	2		1	1	1
1615	1		1	1	1	1		1	1	2	1		1	1
Years with SNP		7	29	36	36	36	31	5	36	36	30	35	24	36

Figure 7: Unique arrangements (C-Range) of unique SNPs by generation for the 2015 Y-Elite 2.0 test of G-18 if:

- **First and last unique SNPs occurred in 1580 and 2015** with 10 average intervals between the other 9 SNPs.
- Then iteratively the first SNP is set to 1581 and the last is set to 2014 and the other 9 SNPs are spaced similarly.
 - Until last unique SNP occurs in 1980, since an impossible 12th unique SNP could occur in 1979 + 36 = 2015.
- In the first iteration, the average spacing is $(2015-1580) \div 10 = 43.5$ years; the overall average is 39.9 years.

A-Range	Years	William I	John	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	Gen 10	G-18
<i>Birth year</i>		~1545	~1587	1622	1663	1701	1732	1760	1793	1821	1874	1907	1929	1962
1580-1581	2	1	1	1	1	1	1	1	1	1	1	1	1	11
1582-1583	2	1	1	2	1	1	1	1	1	1	1	1	1	11
1584	2	1	1	2	1	1	1	1	1	1	1	1	1	11
1585-1586	1	1	1	1	1	1	1	1	1	1	1	1	1	11
1587-1588	2	1	1	1	1	1	1	1	1	1	1	1	1	11
1589-1607	19	1	1	1	1	1	1	1	1	2	1	1	1	11
1608-1614	2	1	1	1	1	1	1	1	1	2	1	1	1	11
1615-1616	5	1	1	1	1	1	1	1	1	2	1	1	1	11
Years with SNP	7	30	35	33	31	30	33	16	35	35	0	35	35	

B-Range	Years	William I	John	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	Gen 10	G-18
<i>Birth year</i>		~1545	~1587	1622	1663	1701	1732	1760	1793	1821	1874	1907	1929	1962
1980-1983	4	1	1	1	1	1	1	1	1	2	1	1	1	11
1984-1996	13	1	1	1	1	1	1	1	1	1	1	1	1	11
1997-2000	4	1	1	1	1	1	1	1	1	1	1	1	1	11
2001-2006	6	1	1	1	1	1	1	1	1	1	1	1	2	11
2007-2015	9	1	1	1	1	1	1	1	1	1	1	1	2	11
Years with SNP	0	36	36	36	17	19	36	36	36	36	32	27	30	36

C-Range	Years	William I	John	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	Gen 10	G-18
<i>Birth year</i>		~1545	~1587	1622	1663	1701	1732	1760	1793	1821	1874	1907	1929	1962
1580-1586	7	1	1	1	1	1	1	1	1	1	1	1	1	2 11
1587-1591	5	1	1	1	1	1	1	1	1	1	1	1	1	2 11
1592-1608	17	1	1	1	1	1	1	1	1	1	1	1	1	1 11
1609-1610	2	1	1	1	1	1	1	1	2	1	1	1	1	1 11
1611-1614	4	1	1	1	1	1	1	1	2	1	1	1	1	1 11
1615	1	1	1	1	1	1	1	1	2	1	1	1	1	1 11
Years with SNP	7	29	36	36	36	31	5	36	36	36	30	35	24	36

Generation	Gen 1	Gen 7	Gen 2	G-18	John	Gen 8	Gen	Gen 6	Gen 3	Gen 4	Gen 5	Gen 9	William
<i>Birth Year</i>	1622	1821	1663	1962	~1587	1874	1929	1793	1701	1732	1760	1907	~1545
Years with SNP(s)	107	107	105	107	95	97	89	88	84	80	74	62	14
Average SNP Space (Years)	38.5												

G18 11 SNP

A-Range	Years	William II	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	G-50
<i>Birth Year</i>		1580	1609	1639	1669	1701	1749	1794	1839	1891	-	-
1580-1591	12	1	1	1	1	1	1	1	1	1	1	9
1592-1608	17	1	1	1	1	1	1	1	1	1	1	9
1609-1610	2	1	1	1	1	1	1	1	1	1	1	9
1611-1612	2	1	1	1	1	2	1	1	1	1	1	9
1613-1615	3	1	1	1	1	2	1	1	1	1	1	9
1616	1	1	1	1	1	1	2	1	1	1	1	9
1617	1	1	1	1	1	1	2	1	1	1	1	9
1618-1623	6	1	1	1	1	1	1	2	1	1	1	9
Years with SNP	29	27	32	31	44	44	44	44	44	33	11	44

B-Range	Years	William II	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	G-50
<i>Birth Year</i>		1580	1609	1639	1669	1701	1749	1794	1839	1891	-	-
1982-2000	19	1	1	1	1	1	1	1	1	1	1	9
2001-2015	15	1	1	1	1	1	1	1	1	1	2	9
Years with SNP	0	34	0	34	34	34	34	34	34	19	34	34

C-Range	Years	William II	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	G-50
<i>Birth Year</i>		1580	1609	1639	1669	1701	1749	1794	1839	1891	-	-
1580-1585	6	1	1	1	1	1	1	1	1	1	1	9
1586-1589	4	1	1	1	1	1	1	1	1	1	1	9
1590-1601	12	1	1	1	1	1	1	1	1	1	1	9
1602-1603	2	1	1	1	1	1	1	1	1	1	1	9
1604-1608	5	1	1	1	1	1	1	1	1	1	1	9
1609-1611	3	1	1	1	1	1	1	1	1	1	1	9
1612-1623	12	1	1	1	1	1	1	2	1	1	1	9
Years with SNP	29	21	38	24	42	22	44	44	44	32	34	44

Generation	Gen 6	Gen 7	G-50	Gen 4	Gen 5	Gen 3	Gen 8	Gen 1	Gen 9	Gen 2	William II
<i>Birth Year</i>	1794	1839	-	1701	1749	1669	1891	1609	-	1639	1580
Years with SNP(s)	122	122	122	120	100	89	84	82	79	70	58
Average SNP Space (Years)	47.2										

G50 9 SNP

Figure 8: (G18, G50) Y-Elite 2.0 Results summary, including (11, 9) most likely generations with at least 1 SNP.

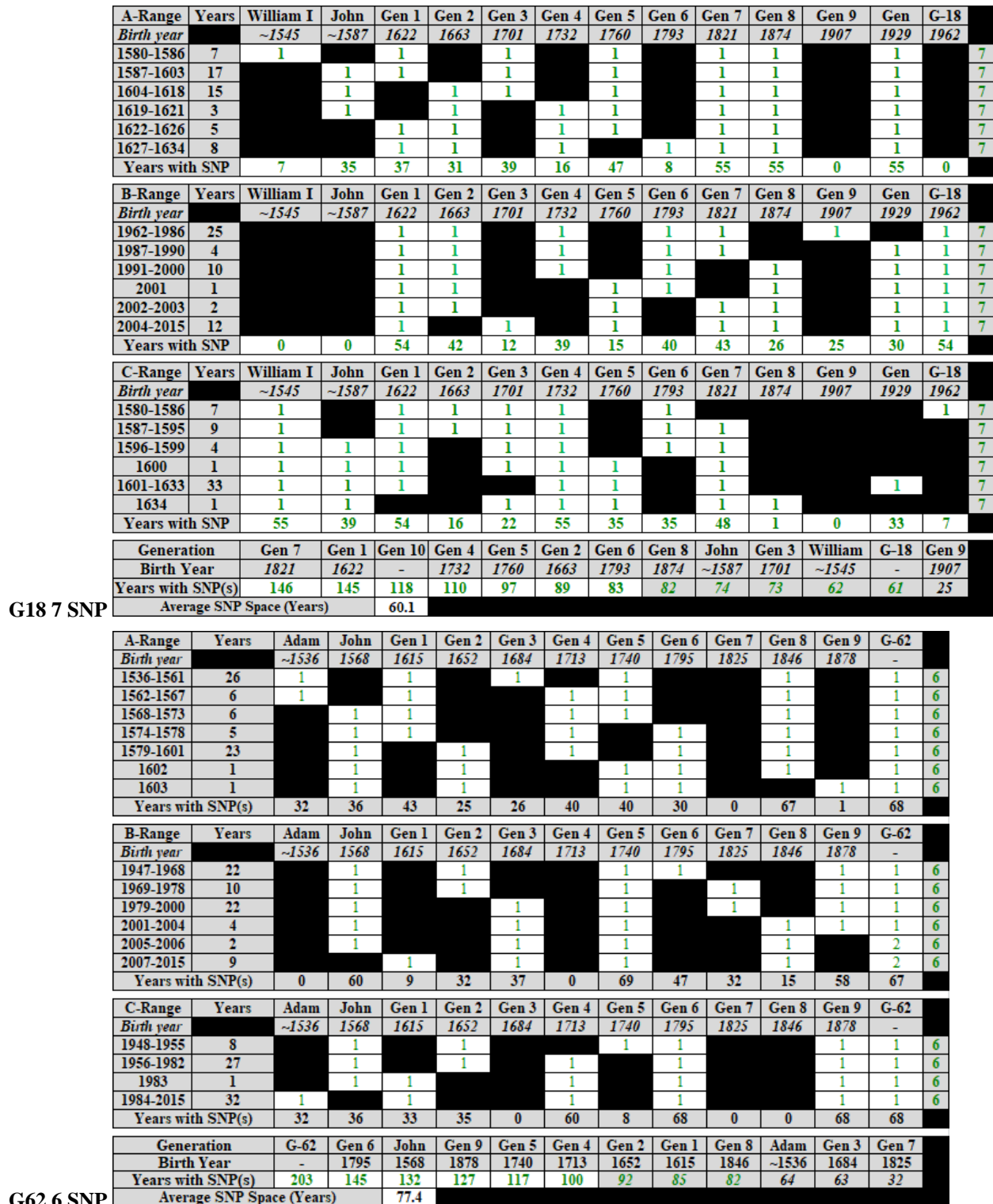


Figure 9: G18 (Big Y) vs. G62 (Y-Elite 2.0) Results, including (7, 6) most likely generations with at least 1 SNP.

Current Status of Felsham Goodrich within Y-DNA Haplogroup E-V13

Sequential subclade maps, showing geographic origin of earliest known ancestors belonging to Y-DNA haplogroup E-V13, a subclade of E-L618, are shown in Figures 10-14.



A1	L618-V13-Z1057-CT55856
K1	L618-V13-Z1057-PH1246
L1	L618-V13*
M1	L618*

E-V13 is a subclade of E-L618. One E-L618 who is not E-V13+, or E-L618, has been found so far. Most E-V13 kits are in subclade E-Z1057, E-CT55856. Only a few kits tested to date are in subclade E-Z1057, E-PH1246.*

Figure 10: geographic locations of earliest-known ancestors of NGS Y-SNP kits belonging to haplogroup E-V13.



- A1 L618-V13-Z1057-CTS5856*
- B1 L618-V13-Z1057-CTS5856-A9723
- C1 L618-V13-Z1057-CTS5856-S3003
- D1 L618-V13-Z1057-CTS5856-S7461
- E1 L618-V13-Z1057-CTS5856-Y16729
- F1 L618-V13-Z1057-CTS5856-Y19509
- G1 L618-V13-Z1057-CTS5856-Z16663
- H1 L618-V13-Z1057-CTS5856-Z38899
- I1 L618-V13-Z1057-CTS5856-Z5017
- J1 L618-V13-Z1057-CTS5856-Z5018 GOODRICH
- K1 L618-V13-Z1057-PH1246*
- L1 L618-V13*
- M1 L618*

Felsham Goodrich belongs to E-Z5018, which is one of 9 SNP subclades of E-CTS5856 seen (Jun 2017), of which 5 have been seen in the United Kingdom. E-Z5018 is by far the most numerous, and currently the most geographically diverse of the 9 SNP subclades. It is found in most of the locations in the map.

Figure 11: geographic locations of haplogroup E-Z5018 among other NGS Y-SNP kits in haplogroup E-V13.



A1 L618-V13-Z1057-CTS5856*	I1 L618-V13-Z1057-CTS5856-Z5017*
B1 L618-V13-Z1057-CTS5856-A9723*	I2 L618-V13-Z1057-CTS5856-Z5017-Z19851
C1 L618-V13-Z1057-CTS5856-S3003*	I3 L618-V13-Z1057-CTS5856-Z5017-Z38334
C2 L618-V13-Z1057-CTS5856-S3003-L540	I4 L618-V13-Z1057-CTS5856-Z5017-Z5016
D1 L618-V13-Z1057-CTS5856-S7461*	J1 L618-V13-Z1057-CTS5856-Z5018*
D2 L618-V13-Z1057-CTS5856-S7461-A8612	J2 L618-V13-Z1057-CTS5856-Z5018-A2192
E1 L618-V13-Z1057-CTS5856-Y16729*	J3 L618-V13-Z1057-CTS5856-Z5018-BY6319
E2 L618-V13-Z1057-CTS5856-Y16729-SK893	J4 L618-V13-Z1057-CTS5856-Z5018-L17
E3 L618-V13-Z1057-CTS5856-Y16729-Z38518	J5 L618-V13-Z1057-CTS5856-Z5018-S2979
F1 L618-V13-Z1057-CTS5856-Y19509*	J6 L618-V13-Z1057-CTS5856-Z5018-Z16242 GOODRICH
F2 L618-V13-Z1057-CTS5856-Y19509-FGC14092	J7 L618-V13-Z1057-CTS5856-Z5018-Z17293
F3 L618-V13-Z1057-CTS5856-Y19509-Y1950	K1 L618-V13-Z1057-PH1246*
G1 L618-V13-Z1057-CTS5856-Z16663-Z43289	L1 L618-V13*
H1 L618-V13-Z1057-CTS5856-Z38899*	M1 L618*

Felsham Goodrich belongs to haplogroup E-Z16242, a rare E-Z5018 subclade now seen in England in Goodrich only. All non-Goodrich E-Z16242 kits are now limited to Portugal, Puerto Rico and Brazil. No E-Z16242* kits have emerged in the Balkans (Bulgaria, Albania, Serbia, Macedonia, Greece, etc.)*

Figure 12: geographic locations of haplogroup E-Z16242 among other NGS Y-SNP kits in haplogroup E-V13.



Figure 13: Felsham Goodrich E-Z16242, E-L1019 vs. non-Goodrich E-Z16242*. The average spacing of 11 unique G18 Y-Elite 2.0 mutations is 38.5 years (Figure 8). G18 has 59 unique SNPs vs. HG01107 (Puerto Rico), so their MRCA lived (59 x 38.5), or ~2,272 years ago (~250 BC; 32 years before Rome invaded Hispania in 218 BC).

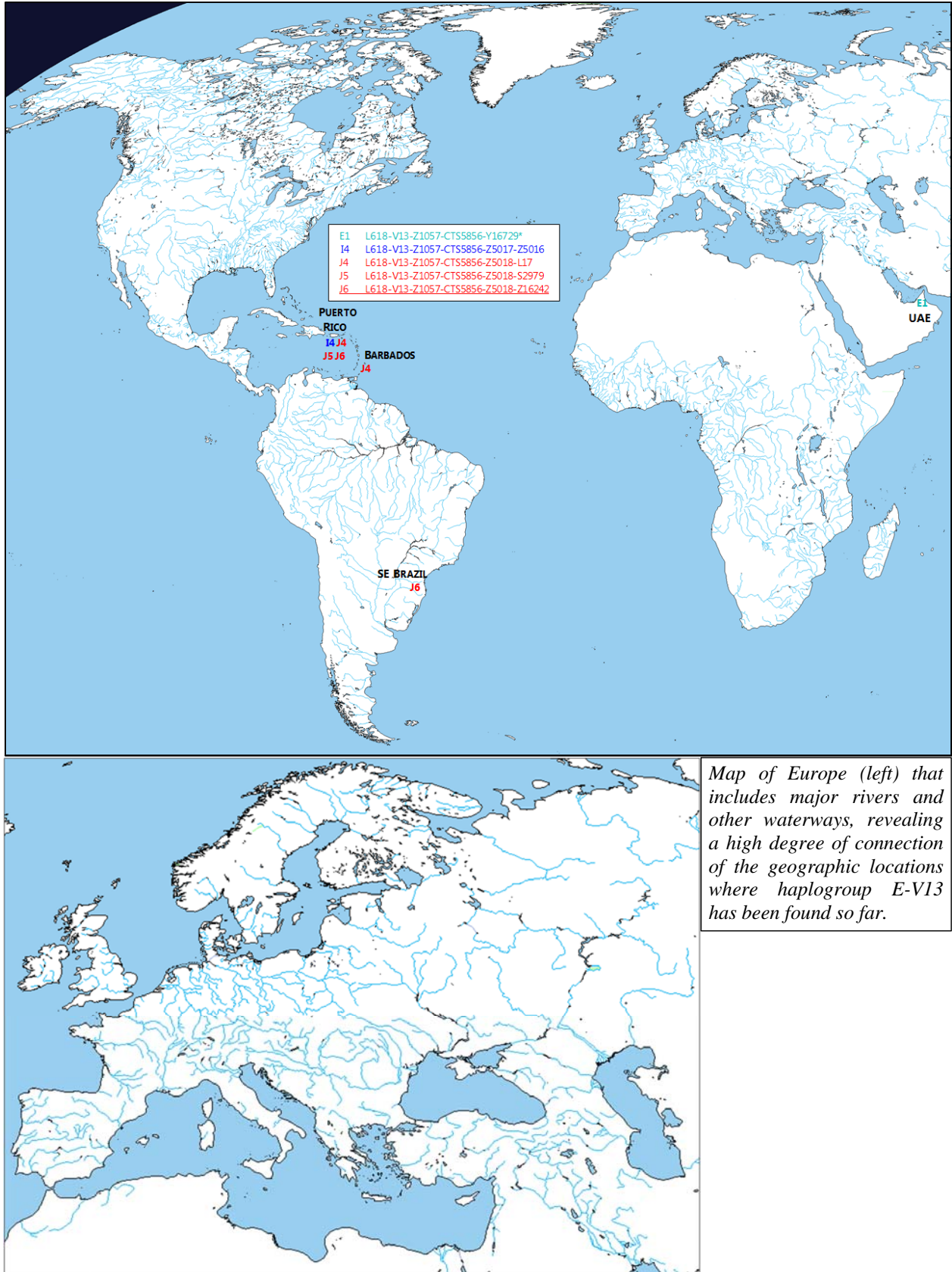


Figure 14: additional geographic locations of NGS Y-SNP E-Z16242+ kits (above); river map of Europe (below).

Goodrich Surname DNA Project: September 2017 Update

~ Editor

The Goodrich Surname DNA Project roster now includes: 75 Y-STR Y-DNA kits, 31 mtDNA kits, 52 Family Finder kits, 3 Y-Elite + 3 Big Y-SNP kits, and 4 YSEQ Felsham Goodrich panel single Y-SNP tests. Big Y kits G96 (surname Winters) and G77 (surname Griswold) share SNP E-F1449 and INDEL E-FGC14573 with G18 (*Y-descendant of Ensign William Goodrich*).

Brief Review of Felsham Goodrich Ancestry from Felsham Wills and Manor Rolls

~ Editor

Goodrich entries in Felsham Manor rolls from 1382-1453 searched in June, 2016 are reviewed:³²

- 1382, 1403 and 1408 entries mention [John Goodrich Sr.](#), whose wife [Isabel](#) appears in 1382.
- Oct 1412 entry, Membrane 10, mentions John Goodrich, Chaplain son of late [John Goodrich Sr.](#)
 - Likely John Goodrich, Chaplain of Felsham; will 20 May 1423; proved 09 Jun 1424.²⁸
 - The will of John Goodrich, Chaplain-Felsham bequeathed to [John Goodrich the Younger](#).²⁸
 - Also likely *Sir John Goodrich, Priest* cited in the 18 Mar 1467 will of Baldwin Cocksedge.²⁹
 - Entry states that the death of [John Goodrich Sr.](#) was recent.
- Mar 1412 entry in Membrane 9 mentions [John Goodrich, Jr.](#)
 - Likely [John Goodrich the Younger](#) in the 1423 will of John Goodrich, Chaplain-Felsham.
 - John Goodrich in 1439, 1440, 1442 entries is also probably [John Goodrich Jr., or the Younger](#).
- [Rose Goodrich](#) (Jan 1449) is probably Rose Goodrich, Widow of Felsham (will 02 Aug 1470).³⁰
- [John Goodrich](#) (1439, 1440, 1442, 1451, 1453 entries) is probably [John Goodrich \(will 1475\)](#).

The result, which includes postulated dates of birth for the children named in the 1475-1554 wills based on the order they are named in the wills, is shown in the Figure 15.³¹ Fortunately, violations of the custom of the manor, regardless of tenure status of the tenant, were recorded with useful genealogical information, such as John Goodrich Sr. vs. Jr. Otherwise the Felsham Manor rolls could have had no Goodrich entries at all. As was the case with the wills dated 1475-1554, what appears to be a single Goodrich ancestral heir per generation in Felsham (*with a possible exception of John Goodrich, Jr. and John Goodrich, Chaplain stated in 1412 that ended in 1424*) enhances the plausibility of the ancestry below.

				ROBERT 1280-1345 Subsidy 1327; Feet of Fines 1336						
				JOHN 1310-1375 wf-Margaret; Feet of Fines 1336						
				JOHN Sr. 1340-1412 wf-Isabel; Rolls 1382-1408						
John-Elder, Chaplain 1365-1424 Roll 1412; W-1423		Geoffrey, Chaplain 1370-1424 Roll 1412; W-1423		JOHN-Younger or Jr. 1380-1439 wf-Rose; Rolls 1412-1442						
				JOHN 1410-1475 wf-Margery; W-1475; Rolls 1449-53						
John 1435-1447 Inferred W-1475	Thomas 1438 #1W-1475	Agnes 1442 #2W-1475	William 1445 #3W-1475	JOHN 1449-1503 wf-Isabel; #4W-1475; W-1503	Isabel 1452 #5W-1475	Alice 1456 #6W-1475	Roger 1459 #7W-1475			
			Isabel 1474 #1W-1503	JOHN 1477-1558 wf-Johan; #2W-1503; W-1554	Robert 1481 #3W-1503	Margery 1484 #4W-1503				
			John 1502-1510 Inferred W-1554	ROBERT 1505-1570 wf-Elizabeth; #1W-1554; W-1563	Emma 1509 #2W-1554	John 1512 #3W-1554	Alice 1516 #4W-1554	Thomas 1520 #5 Will 1554	William 1523 Johan W-1558	
John 1532-1550 Inferred W-1563		ADAM 1536-1597 wf-Ann; #1W-1563; W-1597	Thomas 1540 #2W-1563		WILLIAM 1545-1631 w-Margaret; #3W-1563; W-1631		Emma 1548 #4W-1563	Elizabeth 1552 #5W-1563	John 1555 #6W-1563	
		JOHN 1568-1626 wf-Martha; #3W-1597			WILLIAM 1580-1645 wf-Barbara; #2W-1631	JOHN 1587-1632 wf-Margerie; #1W-1631				
		THOMAS 1615-1679 wf-Anne; to VA			WILLIAM 1609-1645 wf-Margaret; to MA	WILLIAM 1622-1676 wf-Sarah; to CT				

Figure 15: postulated Felsham Goodrich ancestry based on Felsham wills and manor rolls.³²

- ¹ Nathaniel Goodwin, Esq., *Genealogical Notes of the First Settlers of Connecticut-Massachusetts* (1856), 69:
- ² Edwin Hubbard, *The Goodrich Family Memorial* (Chicago, 1883), Parts One, Two and Three.
- ³ S. V. Talcott, *Genealogical Notes of New York and New England Families* (Albany, 1883), 515-542:
- ⁴ Lafayette Wallace Case, M.D., *The Goodrich Family in America* (Chicago: Fergus, 1889):
- ⁵ Henry Stiles, M.D., *The History of Ancient Wethersfield, Connecticut, Vol. II* (NY: Grafton, 1904), 369:
<https://babel.hathitrust.org/cgi/pt?id=coo.31924096458595;view=1up;seq=442;size=175>
- ⁶ Buell Burdett Bassett, *One Bassett Family in America* (Springfield: Bassette, 1926), 334-356.
- ⁷ Donald L. Jacobus, Edgar F. Waterman, *Hale, House and Related Families* (CT Historical Society, 1952), 550:
<https://babel.hathitrust.org/cgi/pt?id=wu.89066151523;view=1up;seq=572;size=175>
- ⁸ Nathaniel Goodwin, Esq., *Genealogical Notes of the First Settlers of Connecticut-Massachusetts* (1856), 84:
<https://archive.org/stream/genealogicalnote00good#page/84/mode/1up>
- ⁹ Henry Stiles, M.D., *The History of Ancient Wethersfield, Connecticut, Vol. II* (New York: Grafton, 1904), 369:
<https://babel.hathitrust.org/cgi/pt?id=coo.31924096458595;view=1up;seq=442;size=175>
- ¹⁰ Mary L. Holman, *Ancestry of Colonel John Harrington Stevens and Wife Frances Helen Miller* (1948), 181:
<https://babel.hathitrust.org/cgi/pt?id=wu.89067408831;view=1up;seq=205;size=150>
- ¹¹ Donald L. Jacobus, Edgar F. Waterman, *Hale, House and Related Families* (CT Historical Society, 1952), 550:
<https://babel.hathitrust.org/cgi/pt?id=wu.89066151523;view=1up;seq=572;size=175>
- ¹² Henry Bond, M.D., *Genealogies of the Early Settlers of Watertown, Massachusetts* (NEHGS: Boston, 1860):
- ¹³ Sidney Perley, *Goodridge Memorial: Ancestry and Descendants of Moses Goodridge* (Washington: 1884):
- ¹⁴ Lafayette Wallace Case, M.D., *The Goodrich Family in America* (Chicago: Fergus, 1889):
- ¹⁵ Edwin Alonzo Goodridge, M.D., *The Goodridge Genealogy* (New York, 1918):
- ¹⁶ Merton T. Goodrich, *The American Genealogist* 43:45 (1966):
<http://goodrichconnection.org/gagoodrich/biographies/William%20Goodrich%20Of%20Watertown.pdf>
- ¹⁷ Charles Alfred Goodricke, *History of the Goodricke Family* (London, 1885).
- ¹⁸ Patti Sue McCrary, *Wilson Families in Colonial Virginia* (Heritage: Maryland, 2007), 157-193.
- ¹⁹ Delores Goodrick-Beggs, *The Goodricks of Kansas City, Kansas and Related Families* (1998-2005).
- ²⁰ Edwin Alonzo Goodridge, M.D., *The Goodridge Genealogy* (New York, 1918), pp 50-51.
- ²¹ Edwin Alonzo Goodridge, M.D., *The Goodridge Genealogy* (New York, 1918), pp 271-273.
- ²² *Whence Came William Goodrich of Watertown*, Merton T. Goodrich, *The American Genealogist*, 43:45 (1966).
<http://www.case42.goodrichconnection.org/gagoodrich/biographies/William%20Goodrich%20Of%20Watertown.pdf>
- ²³ Architecture details: <http://www.britainexpress.com/architecture/saxon.htm>
- ²⁴ <http://www.familytreedna.com>
- ²⁵ <http://www.fullgenomes.com>
- ²⁶ **HH** = *Hale, House and Related Families*, Donald L. Jacobus, Edgar F. Waterman (CT Historical Society, 1952):
<https://babel.hathitrust.org/cgi/pt?id=wu.89066151523;view=1up;seq=572;size=175>
WFV = *Wilson Families in Colonial Virginia*, Patti S. McCrary (Heritage Books: MD, 2007), pp 157-193.
LWC = *The Goodrich Family in America*, Lafayette Wallace Case, M.D., (Chicago: Fergus, 1889):
JR = *Josiah Raynor of Manorville and Some of His Descendants*, Stuart Payne Howell (NH, 2000), p 154.
<https://yfull.com/tree/E/>
- ²⁷ <https://yfull.com/tree/E/>
- ²⁸ Probate records 1370-1858, Episcopal Consistory Court, Archdeaonry of Norwich, volume 3, p 108.
- ²⁹ *Wills & Inventories, Registers of the Commissary of Bury St. Edmunds and the Archdeacon of Sudbury*, Samuel Tymms (London: 1850), 44.
- ³⁰ Probate Records 1354-1857, Church of England, Archdeaonry of Sudbury Court, volume 2, p 483.
- ³¹ Editor and Joseph Neilson email correspondence and discussion.
- ³² "Proven vs. Plausible Goodrich Ancestry in the Felsham Manor Rolls and Wills," *GFA Quarterly*, 13:3, 49 (September, 2016): http://goodrichfamilyassoc.org/Newsletters/Documents/Sept_2016_archive_version.pdf