

Orangeburgh District DNA Project

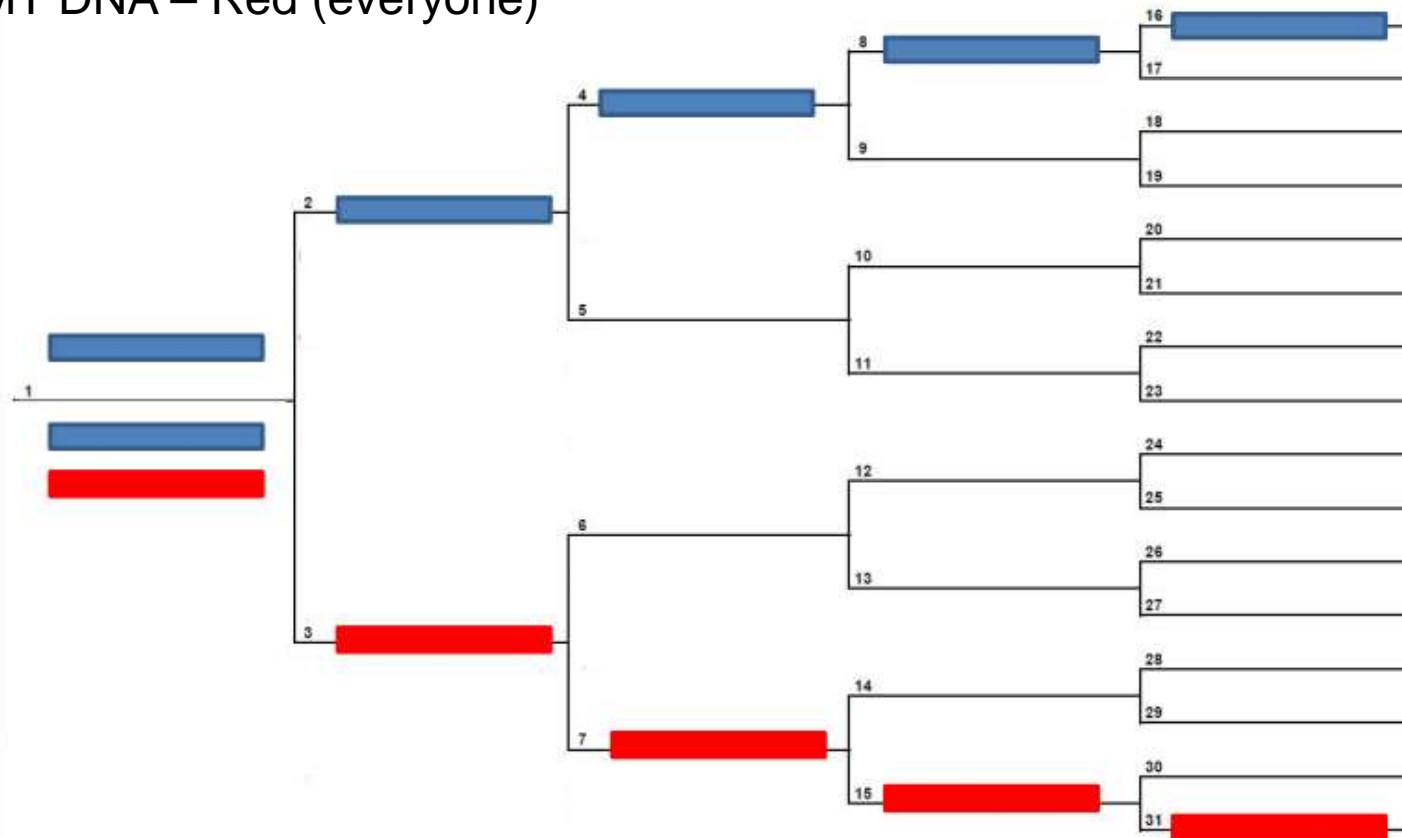
Finding Family Connections with Autosomal DNA Testing

Margaret G. Waters; October 2015

- Review some DNA basics
- Address privacy issues
- Evidence vs. Proof
- Look at some specific examples

3 Types of DNA Testing

- Y DNA – Blue (males only)
- MT DNA – Red (everyone)



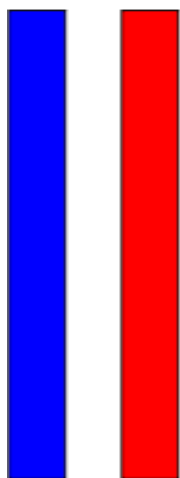
- AT DNA – All Lines (everyone)

Margaret G. Waters; October 2015

Autosomal DNA Basics

- Autosomal DNA gets randomly recombined in every generation
- Recombination creates segments of DNA

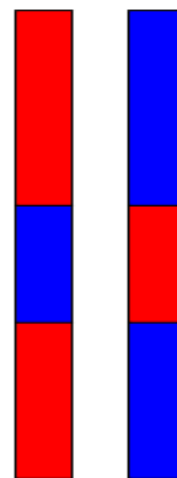
Dad
&
Mom



1st
Child



2nd
Child



Autosomal DNA Basics

- **Segments** are measured in **centimorgans (cM)** and occur on one of our 22 pairs of chromosomes or our X chromosome(s)
- We have smaller (or no) segments from more distant ancestors



	A	B	C	D	E
1	Chr	Start	End	cM	SNPs
2	6	2,611,847	53,654,545	66.80	20683
3	6	103,458,895	170,761,395	84.30	17528
4	6	122,956,019	134,406,736	12.89	2699
5	7	31,157,868	45,051,050	16.79	3579
6	7	51,498,482	116,185,999	51.75	12781
7	7	51,792,326	145,879,201	81.87	19039
8	7	54,629,782	77,501,116	13.60	2881
9	7	147,816,361	153,246,032	13.55	1518
10	8	25,109,982	29,864,735	7.01	1584
11	8	29,874,139	63,941,141	21.27	5795
12	8	64,372,741	131,905,535	65.57	14887
13	8	67,388,869	139,233,374	74.25	16487

Privacy Issues

- Y DNA and Mt DNA tests do not identify exact relationships
- Autosomal DNA testing alone can confirm or deny first degree relationships (parent/child or full siblings)
- Never share data, including names with kit numbers, on living people unless permission to do so has been given

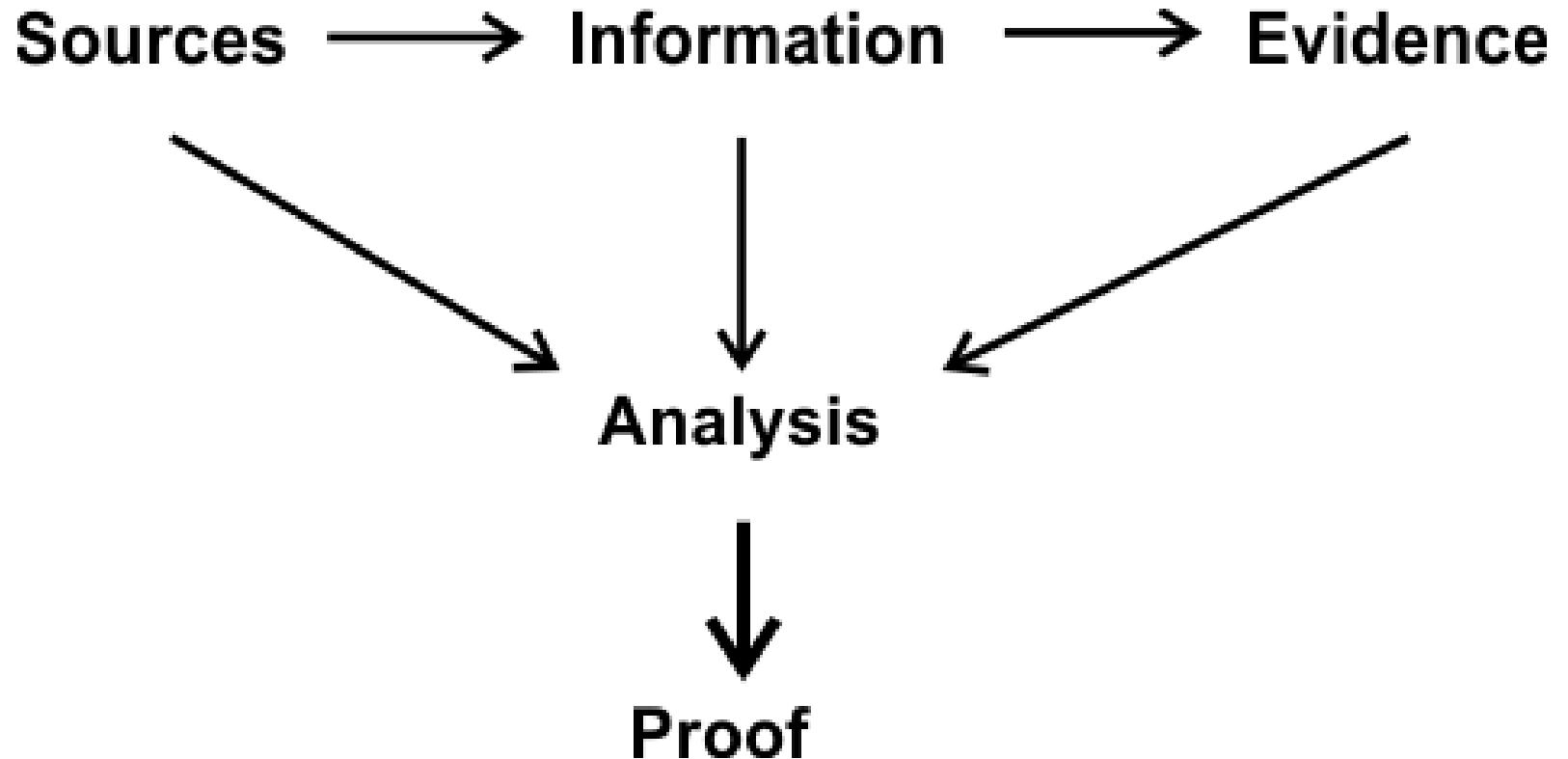
Privacy in the Orangeburgh District DNA Project

- Access to OGS GS Family Finder page is given only to those who have shared their lineage data
- Lineage charts start at 3rd generation and go back
- Published results will not include names or kit numbers of individuals tested
- Published results will focus only on matches made in the 6th generation or further back unless specific permission has been granted by testee

Evidence vs. Proof

- Evidence is information relative to a particular question
- Proof is a conclusion backed by thorough research, sound analysis and reliable evidence
- *Evidence Explained* by Elizabeth Shown Mills, pages 822, 827

Evidence vs. Proof



From: *Evidence Explained* by Elizabeth Shown Mills

Privacy & Evidence/Proof

Relationship	Average Shared DNA	Range of Shared DNA
Identical Twin	100%	100%
Parent/Child	50%	50%
Full Siblings	50%	
Grands, Aunt, Uncle	25%	
1 st Cousins	12.5%	7.31 – 13.8%
1 st Cousins 1x removed	6.25%	3.3 – 8.51%
2 nd Cousins	3.13%	2.85 – 5.04%
3 rd Cousins	.78%	.3 – 2.0%
4 th Cousins	.20%	.07 - .50%

Data from 23andMe website

Relationship	Chance of Match	MRCAC Generation
First Cousin	100%	3 rd – grandparents
Second Cousin	Greater than 99%	4 th – great grands
Third Cousin	About 90%	5 th – 2 gr. Grands
Fourth Cousin	About 50%	6 th – 3 gr. Grands
Fifth Cousin	About 10%	7 th – 4 gr. Grands
Sixth Cousin	Less than 2-5%	8 th – 5 gr. Grands

Orangeburgh District DNA Project

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Family Finder Home

Welcome

The Family Finder test is used to trace all of the lines of your family, both paternal, maternal, and all those in between (i.e. paternal grandmother's father's line). It is most effective at identifying potential relationships within the most recent five generations but may provide useful results out to seven generations. The Family Finder pages allow sharing of pedigree information among participants to help identify potential relationships.

The Family Finder section is restricted to Family Finder test participants who have joined the Orangenurgh District DNA project and shared their **Pedigree Information** with the project.

Members please login:

Email:

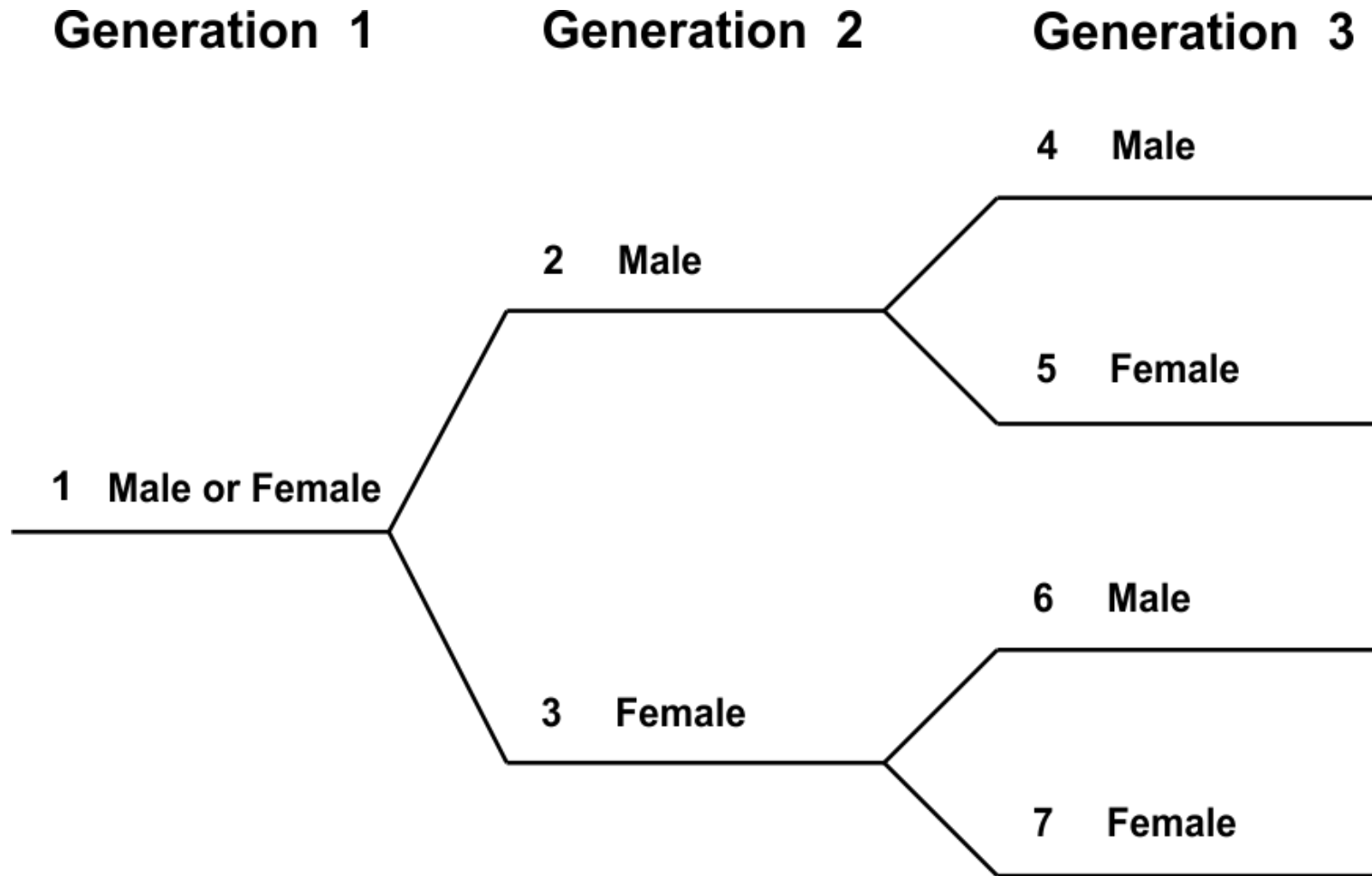
Password:

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OGSGS Family Finder Page

██████████	██████████	need pedigree
██████████	██████████	Baughman, Epting, Felder, Fulmer, Moye, Neeley, Shumpert, Snell, Sojourner, Walker, Wiggers, Wise Pedigree
██████████	██████████	need pedigree
██████████	██████████	Shephard, Shuler, Wannamaker Pedigree
██████████	██████████	Bunch, Haigler, Joyner, Lewis, Shoemaker, Wannamaker Pedigree
██████████	██████████	need pedigree
██████████	██████████	Fickling, Hughes, Jackson, Jeffcoat, Lee, Livingston, Morgan, Reed, Segrest, Sheppard, Wilson Pedigree
██████████	██████████	need pedigree
██████████	██████████	Gibson, Gipson, Hutto, Posey Pedigree
██████████	██████████	Baxter, Golson, Miller, Negely, Pou, Shilling, Staley Pedigree
██████████	██████████	need pedigree
██████████	██████████	need pedigree
██████████	██████████	Amaker, Barrs, Chaney, Crimm, Hollman, Jeffcoat, Johnson, Martin, Sturkey, Tindal Pedigree

Ahnentafel Numbers



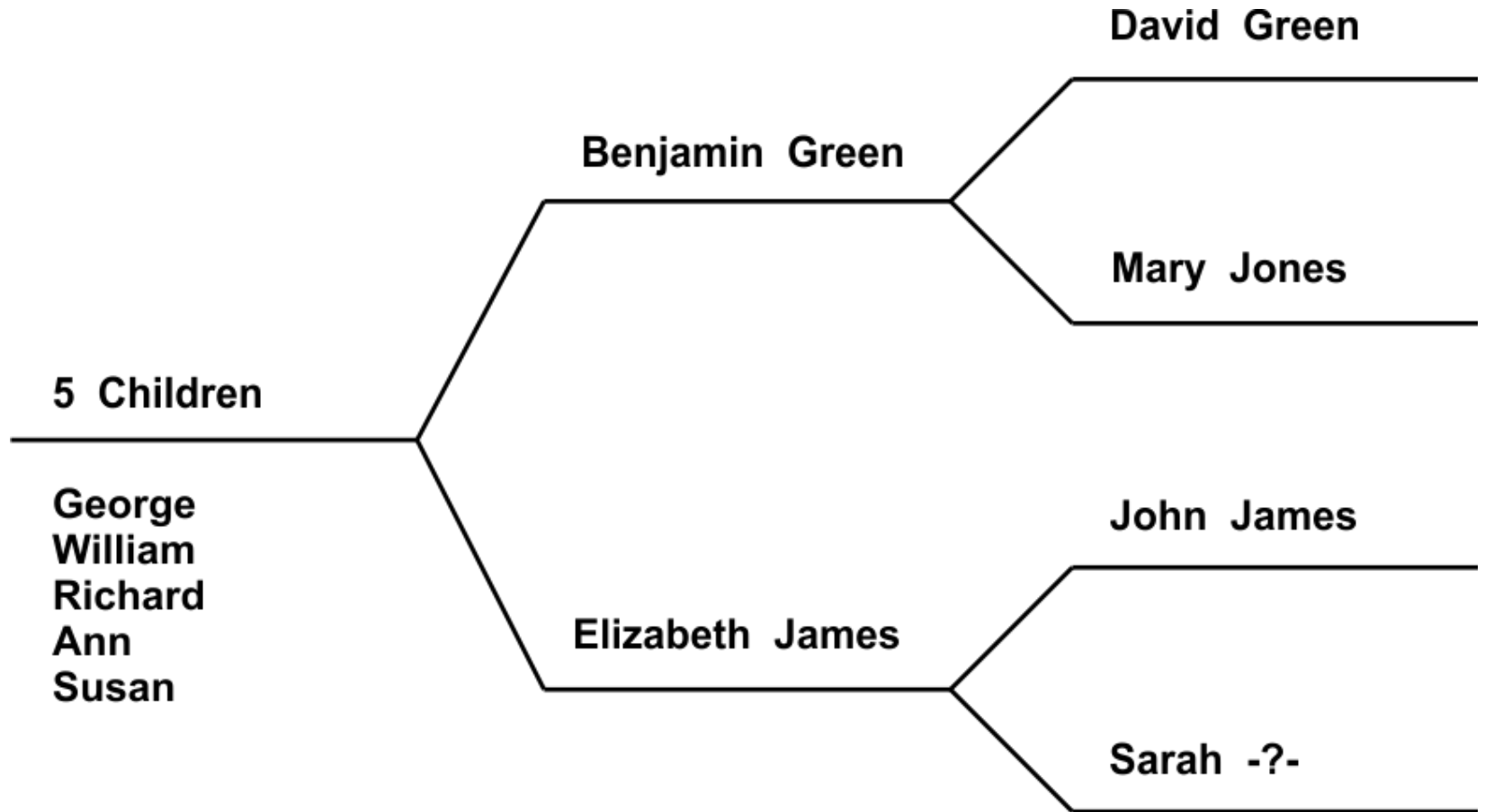
Ahnentafel Numbers

	A	B	C	D	E	F	G	H	I	J
1		X	Ahnentafel or Lineage Chart for Orangeburgh District DNA Project							
2			(An individual's father is twice that individual's number)							
3			(An individual's mother is twice that individual's number plus 1)							
4										
5	No.	Surname	Given Name(s)	Suffix	Born	Where	Died	Where	Comments	
6										
7		1st Generation (person tested):								
8	1				XXX	XXX	XXX	XXX	Kit #	
9										
10		2nd Generation (parents - data not needed!):								
11	2	XXX	XXX		XXX	XXX	XXX	XXX	paternal lineage	
12	3	XXX	XXX		XXX	XXX	XXX	XXX	maternal lineage	
13										
14		3rd Generation (grandparents):								
15	4									
16	5									
17	6									
18	7									
19										
20		4th Generation (gr-grandparents):								
21	8									
22	9									
23	10									
24	11									
25	12									
26	13									
27	14									

New Look for Lineage Charts on OGSGS Family Finder Page

	<p>28 - Edward BOLEN, Jr. Born ca. 1790 in Orangeburgh Dist, SC. Died 1853 in Orangeburgh Dist, SC.</p> <p>29 - Mary S. BONNETTE Born ca. 1807 in Orangeburgh Dist, SC. Died 1876 in Orangeburg Co, SC.</p> <p>30 - Daniel FOGLE Born ca. 1786 in Orangeburgh Dist, SC. Died 1858 in Orangeburgh Dist, SC.</p> <p>31 - Charlotte HAIR Born ca. 1802 in Orangeburgh Dist, SC. Died 1885 in Orangeburg Co, SC.</p>
Generation 6: 3 gr-grands	<p>48 - Jacob HERR Born ca. 1731 in Germany. Died 1813 in Orangeburgh Dist, SC.</p> <p>49 - Eva Catherine UNKNOWN Born ca. 1750 in Germany. Died >1830 in Orangeburgh Dist, SC.</p> <p>52 - David MAREE Born <1766. Died ca. 1814 in Marion Dist, SC.</p> <p>53 - Penelope UNKNOWN Born <1765. Died 1833 in Marion Dist, SC.</p> <p>54 - Joseph Mallard REASONOVER Born 1788 in NC. Died 1865.</p> <p>55 - Jane ROZIER Born 1785. Died >1850.</p> <p>56 - Edward BOLEN, Sr. Born ca. 1740 in Ireland. Died >1805 in Orangeburgh Dist, SC.</p> <p>57 - Ann Elizabeth SALLEY Born 1757 in Orangeburgh Twp, SC. Died 1832 in Orangeburgh Dist, SC.</p>

MRCAC and their children



3rd Generation MRCAC

3rd Generation:		
4	Green	Benjamin
5	James	Elizabeth
6		
7		
4th Generation:		
8	Green	David
9	Jones	Mary
10	James	John
11	Unknown	Sarah
12		
13		
14		
15		

3rd Generation:		
4		
5		
6	Green	Benjamin
7	James	Elizabeth
4th Generation:		
8		
9		
10		
11		
12	Green	David
13	Jones	Mary
14	James	John
15	Unknown	Sarah

Multiple MRCACs - not so good

6th Generation:

Herr	Jacob
Unknown	Eva Catherine
Maree	David
Unknown	Penelope
Reasonover	Joseph Mallard
Rozier	Jane
Bolen	Edward
Salley	Ann Elizabeth
Bonnette	John (probably)
Unknown	Sarah (probably)
Vogle	Anthony
Unknown	Rachel
Hare	(male)
Unknown	(female)

7th Generation:

Maree	Isaac
Unknown	Elizabeth
Rozier	William
Brown	Chloe
Salley	Martin
Yonn	Susannah (probably)
Bonnette	William (possibly)
Unknown	Mary (possibly)
Herr	Jacob
Unknown	Eva Catherine

6th Generation:

Carson	Patrick
Unknown	Rebecca
Herr	Jacob
Unknown	Eva Catherine
Cain	Patrick
Griffith	Mary
Wolfe	Joseph
Garrick	John
Fogle	Catherine
Fogle	John
Houser	Magdelene
Bonnette	David
Baltzegar	Margaret Susan
McMichael	Jacob
DeWitt	Sarah
Judy	John
Bolen	Nancy

7th Generation:

Vogel	Anthony
Unknown	Rachel
Vogel	Anthony
Unknown	Rachel
Bolen	Edward
Salley	Ann Elizabeth

Ulrich Sterchi and Margaret Koller

- Ulrich Sterchi, born 1733 in Switzerland, died before 1809 in Orangeburgh District, SC
- Margaret Koller/Culler, born 1739 in Orangeburgh Township
- Five children:
 1. Anna, baptised by Rev. Giessendanner
 2. **William**, per family tradition and other evidence
 3. **Benjamin**, per family tradition and other evidence
 4. John, per family tradition and other evidence
 5. Molly per family tradition and other evidence

Ulrich Sterchi and Margaret Koller

- **Kit A** has this couple in the 6th generation and is a descendant of **Benjamin** Sturkey
- **Kit B** has this couple in the 7th generation and is a descendant of **William** Sturkey
- Almost no chance of another MRCAC

	C	D	E	F	G	H	
	Kit	Chr	Start	End	cM	SNPs	
	B	9	2,155,758	6,691,530	9.23	1800	
	B	9	89,309,221	93,448,294	5.87	1200	

Isaac Poole and Keziah -?-

- Living in Orangeburgh District by the time of the 1800 census
- Family traditions and other records suggest they had at least these children:
 1. **Walter**, born about 1800
 2. **Lucy**, born in 1803, married a Yaun
 3. William
 4. Harriet, married a Gunter
 5. Young A.
 6. Isaac

Isaac Poole and Keziah -?-

- **Kit A** has this couple in the 6th generation and is a descendant of **Lucy**
- **Kit B** has this couple in the 8th generation and is a descendant of **Walter**
- No other apparent MRCACs

Kit	Chr	Start	End	cM	SNPs
A	22	130,793,738	145,017,179	22.93	4200
B	22	130,793,738	145,017,179	22.93	4200

Hugh Phillips and Mary Bolen

- Married about 1795 and had at least 10 children:
 1. **Bolen** Phillips, born 1796
 2. Patrick Phillips, born about 1798
 3. Ann Phillips, born about 1799
 4. John Summer Phillips, born about 1801
 5. **Jacob** Phillips, born 1805
 6. James D. Phillips, born about 1806
 7. Mary Eleanor Phillips, born 1809
 8. **Hugh Edward** Phillips, born 1811
 9. William Thomas Phillips, born 1816
 10. **David Vastine** Phillips, born 1818

Hugh Phillips and Mary Bolen

Kit	MRCAC Generation	Descended From
A	5	Hugh Edward Phillips
B	8	Jacob Phillips
C	6	Bolen Phillips
D	6	David Vastine Phillips

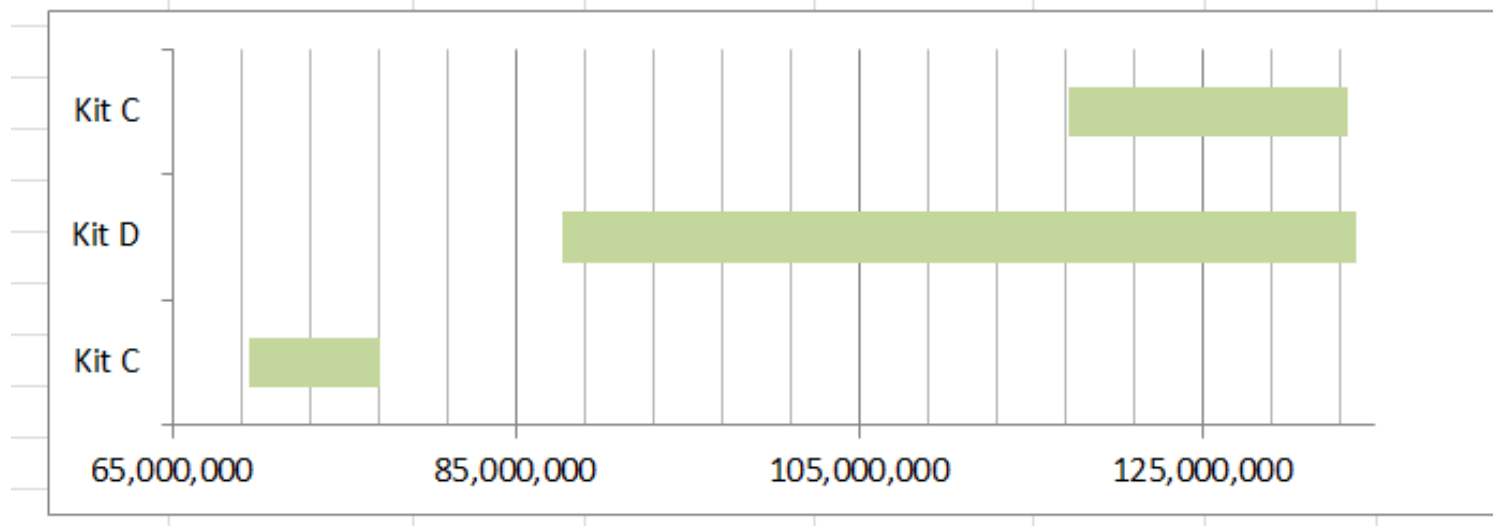
Hugh Phillips and Mary Bolen

- **Kit A** has this couple in the 5th generation and is a descendant of **Hugh Edward Phillips**
- **Kit B** has this couple in the 8th generation and is a descendant of **Jacob Phillips**
- No other apparent MRCACs
- 7.86 cM match with 1400 SNPs on chromosome 9

Hugh Phillips and Mary Bolen

Comparisons to Kit A (Gen 5)

Match	Chr	Start	End	cM	SNPs
Kit C (Gen 6)	3	69,393,361	77,090,819	11.75	1968
Kit D (Gen 6)	3	87,740,122	133,916,846	34.41	9100
Kit C (Gen 6)	3	117,233,816	133,463,490	15.86	4100



A = Hugh Edward Phillips C = Bolen Phillips D = David Vastine Phillips

Heini Sali and Maria von Arx

- Heini Sali, baptized 1694 in Switzerland, died in 1765 on Orangeburgh District, SC
- Maria von Arx, baptized 1697 in Switzerland, date and location of death not certain
- 5 children, born in Switzerland:
 1. Anna Maria, baptized 1721
 2. Heini, baptized 1723, married in 1744
 3. Barbara, baptized 1725
 4. **Martin**, baptized 1730
 5. Elizabeth, baptized 1733

Heini Sali and Maria von Arx or possible second wife

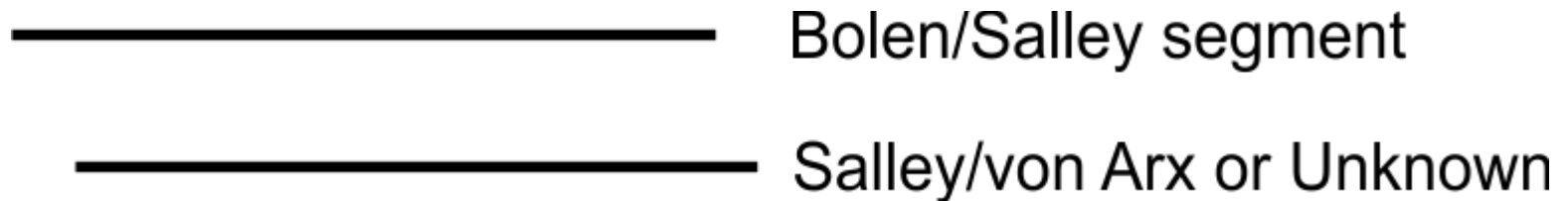
- Heini Sali (Henry Salley, Sr.) and Maria or a possible second wife had one child:
 1. **John** Salley, born about 1740, probably in Orangeburgh Township, SC. No known record of John's birth but Henry, Sr. was likely the only male Salley who would have had children born at this time.

Heini Sali and Maria von Arx or possible second wife

- **Kit A** has this couple in **both** the 7th and 8th generation and is a descendant of **John Salley** in both cases
- **Kit B** has this couple in the 8th generation and is a descendant of **Martin Salley**
- Almost no chance of another MRCAC
- Kits A and B have a 15.88 cM match on chromosome 1
- For Kit B this match lies within a larger match traced back to MRCAC of Edward Bolen and Ann Salley. Ann was one of Martin's daughters.

MRCAC pushed back

- Kit B has Edward Bolen and Ann Salley in Generation 6
- Kit B has non-project match through a son of Edward Bolen/Ann Salley descendant from 1,794,162 to 9,315,315 on chromosome 1



- Kit B matches Kit A from 2,514,775 to 9,690,404 on chromosome 1, pushing segment ID back 2 more generations

How You Can Help

- Provide your full lineage data to the project
- Pass along information about 6th or 7th generation matches with only one MRCAC
- Get additional relatives to test and join the project