

Y-DNA Testing of a Paper Trail – The Fox Surname Project

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Abstract: Combining conventional genealogical research with Y-DNA testing offers a powerful tool for confirming male lines of descent. One prominent American Fox family of Colonial Virginia had been well studied, but some relationships remained unverified. For example, was Henry Fox 2nd (1674–1750) actually the son of Henry Fox 1st (1650–1714) and Anne West? Some genealogists had denied the connection based on a lack of evidence in his grandfather's will. We analyzed Y-DNA short tandem repeat (STR) results from selected descendants of this Colonial Fox family to answer this and other outstanding questions. The DNA evidence agreed with traditional research identifying Henry Fox 2nd as the true son of Henry Fox 1st. Henry Fox 1st belonged to the R1b-L47 haplogroup, and we inferred his 37-marker STR haplotype, giving us a firm basis for comparison. DNA testing of other Fox men was able to confirm or refute proposed relationships to this family and, in the process, expand on other genealogical research efforts. Most unexpectedly, a connection to a well-researched Colonial Philadelphia Fox family was uncovered.

Introduction

The history of the American Fox families in colonial Virginia has been exhaustively studied, particularly the ancestry and the descendants of Henry Fox 1st (1650–1714) and Anne West. Many published Fox family trees have made erroneous connections to this family, partly because this Fox line can be traced back to 1541 in Buckinghamshire, England, and partly because Anne West was the grand niece of Lord De La Warr and had royal ancestry. Probably the most thorough review of this family line was done by Joseph Steadman (1972). However, he admitted that his conclusions were often based on limited or conflicting evidence. Thus, this Fox family of Virginia offers a wonderful target for verification by genetic testing. Checking such a paper trail is by far the best way to use Y-DNA testing.

The Fox Y-DNA Surname Project was started early in 2004 with the testing of two Fox males who were thought to be about eighth cousins based on indirect, published information. When their test results matched closely, we were able to link a Colonial American Fox family from Philadelphia with their British cousins, as told in the book *Growing with America – the Fox Family of Philadelphia*

(Fox, 2006). (A detailed family tree for the British family, descendants of Henrie Fox, is available from Charles Pease, Kinloch Lodge Hotel, Sleat, Isle of Skye, UK. <http://kinloch-lodge.co.uk/>). Using Big Y™ testing (Family Tree DNA, Houston, Texas, USA; FTDNA), we can estimate rather accurately when this link occurred. The Fox Surname Project now includes data for nearly 200 men of the Fox (or similar) surname who have tested 37 short tandem repeat (STR) markers or better, including many who traced their ancestry to Colonial Virginia, allowing us to test hypotheses that have been unresolved for more than a century.

This paper provides a number of examples from the Fox Project of the combined use of conventional genealogy with Y-DNA testing. In each case, we started with a proposed genealogical trail, identified the possible weak point, and tested descendants of several lines appropriately. This procedure has been called triangulation. The affordability and sensitivity of the 37-marker test made it the obvious choice for this study. In all cases, the 37-marker Y-DNA STR test was adequate to support a connection, and even a

12-marker test would have disproven one. In several cases, however, testing additional STR markers or SNP testing confirmed the results.

Figure 1 summarizes Steadman's research on the lines of descent considered in this paper. Primary attention is given to Henry Fox 1st, who was born in England in about the year 1650 and married Anne West in Virginia in about 1673. Steadman lists four children, Henry 2nd, John, Thomas, and Anne. However, some researchers denied that Henry 2nd (1674–1750) was their son because he was not mentioned in the will of Anne West's father. Because descendants of both Henry 2nd and Thomas have been tested, the Fox Surname Project allowed us to address this question.

John Fox, son of Henry Fox, 1st, is not shown in Figure 1 because he is not claimed as the ancestor of any Fox project members. Henry, 1st, also had a brother named John Fox (1652–) who married a Miss Lightfoot (possibly Margaret). He is shown because he has been claimed as an ancestor, since disproven by DNA testing.

Known ancestors of other Fox family groups to be discussed in this paper are:

- Richard Fox (1710–1771) who has been identified by several genealogists (but not Steadman) as the son of either Henry Fox 2nd and Mary Kendrick or Thomas Fox and Mary Tunstall;
- Matthew Fox (1766–1854), might have descended from John Fox, elder brother of Justinian. There was a John Fox on the same ship to Philadelphia who left progeny but then disappeared from the record. If this were the case, Henrie Fox would have been the common ancestor of all three groups (Fox, 2006, p. 246–248).
- William Fox (1710–1764) who married Sarah Avent, identified by Steadman as the son of Henry Fox 2nd and a second wife, Mary Claiborne.

We now report on a number of these relationships, resulting in some surprising connections to well-researched Fox family trees.

Genetic Testing of Known Henry Fox/Anne West Descendants

This paper focuses on testing a large group of STR markers on the Y chromosome. The number of repeats can be measured, and the resulting set of numbers (i.e., marker repeats) is called

one's haplotype. Only men carry the Y chromosome, and the haplotype is passed almost intact from father to son. Replication errors occur frequently enough with these markers, however, that this test is useful for genealogical purposes.

The interpretation of STR testing results is governed by the laws of probabilities of rare events, and this gives a wide range of estimated generations back to a common ancestor. Estimates are based on Bayesian statistics and depend on the *a priori* probability that measured father–son marker mutation rates can be applied to the situation at hand. Results for men with different surnames should be evaluated on a more stringent basis than those where the surname is the same and, when evaluating a well researched paper trail, the *a priori* probability can be close to 1.0.

FTDNA guidelines say that if two men match on 33 or more of 37 STR markers, they are related within a genealogical time frame (Family Tree DNA, 2016). In the experience of Fox Project administrators, this approximation only holds when matches also have the Fox surname. Even then, we require members to supply ancestral information and look for common geographical locations. The 37-marker test was used because it has the highest average mutation rate of all the FTDNA panels and its affordability has made it the standard test for new project members.

The Y-DNA Haplotype of Henry Fox 1st

How do we know the haplotype of Henry Fox 1st? The answer is given in Table 1. Early on, we tested 37 markers for two well-documented Fox men (Group 1 in Table 1 and Figure 1) who descended from two different sons of another Henry Fox (1768–1852) who married Sarah Harrell, a southern USA Fox family with many living descendants (Faucette & McCain, 1971). The sons were William Fox (1791–1852) and Joseph Carroll Fox (1802–1879). The 37-marker haplotypes of these fourth cousins were identical. Another cousin (not shown) matched them on 25 of 25 markers. As a very good approximation then, this must also be the haplotype of their common ancestor, Henry Fox (1768–1852). Most genealogists accepted that this Henry Fox was the son of William Fox (1743–1816) and his wife Sarah Carroll, and the well-defined ancestry then went to William's father Henry Fox 3rd (1698–1770) and grandfather Henry Fox 2nd (1674–1750).

Secondly, we tested two second cousins (Group 2) who had identical 37-marker haplotypes to each

Table 1. STR results (37 markers) for descendants of Henry Fox and Anne West. These men belong to haplogroup R1b-L47.

Line of Descent from Henry Fox 1 st	Results for Markers that Differ ¹					G.D. ¹
	DYS 458	DYS 385a,b	DYS 470	DYS 460	CDY a,b	
Group 1: Henry 1 / Henry 2 / Henry 3 / William						
Henry 1 / Henry 2 / Henry 3 / William / Henry / William / +4 gen	16	11-14	17	11	36-38	0
Henry 1 / Henry 2 / Henry 3 / William / Henry / Joseph / +4 gen	16	11-14	17	11	36-38	0
Group 2: Henry 1 / Henry 2 / Henry 3 / Thomas						
Henry 1 / Henry 2 / Henry 3 / Thomas / Thomas / Melison / Felix / Samuel / +2 gen	16	11-14	17	11	35-38	1
Henry 1 / Henry 2 / Henry 3 / Thomas / Thomas / Melison / Felix / Everett / +2 gen	16	11-14	17	11	35-38	1
Group 3: Henry 1 / Thomas						
Henry 1 / Thomas / Joseph / Joseph / +8 gen	16	11-14	17	10	36-38	2
Henry 1 / Thomas / Joseph / Thomas +5 gen	16	11-11-11-14	18	11	36-38	2
Group 4: Elder						
	15	11-14	18	11	36-38	1
Probable Ancestral Haplotype for Henry Fox 1st						
	16	11-14	17	11	36-38	

¹ To protect the genetic privacy of the participants, only mismatches are shown. The remaining markers were identical.

² G.D. refers to the genetic distance from the “ancestral” modal haplotype. It equals the number of mismatches from the modal since all these are single step deviations.

other and descended from another son of Henry Fox 3rd named Thomas Fox (1725–1822) who had married Elizabeth Hancock. Joseph Steadman (1972, pp. 54, 61) has Mary Goodwyn as Thomas' mother and Martha Keene as the mother of his half brother William. The 37-marker haplotypes of the descendants of each of these two sons of Henry Fox 3rd differed at only one marker, a multivalued, rapidly-mutating marker called CDYa,b. This five-person matchup defined the haplotype of the common ancestor, Henry Fox 3rd, except for the value at CDYa,b, and the relationship was now proven back another two generations to Henry Fox 3rd. The question still remained: Was Henry Fox 3rd (1698–1770) the son of Henry Fox 2nd (1674–1750) and the grandson of Henry Fox 1st?

In 2013 and 2014, we tested two descendants of another son of Henry Fox 1st and Anne West at 37 markers (Group 3). This son was Thomas Fox (1680–?), who married Mary Tunstall (Steadman, 1972, p. 27). These two men matched Group 1 at CDYa,b but differed from one another at DYS458, DYS385a,b, DYS460, and DYS470. On each of these four markers, however, one of them matched the first two groups, so that their genetic distance from the modal haplotype was only 2. A consensus ancestral 37-marker haplotype for all six cousins can thus be defined, and Thomas Fox and Henry Fox 2nd could indeed be considered brothers.

Finally, we have a slave descendant named Elder, who is clearly related based on his Y-DNA test results. At 37 markers, he matched our first group at all but markers DYS458 and DYS470. Since the actual connection remains unknown, further testing was deemed necessary. He and one member from each of our first two groups have been tested out to 67 markers. The two Foxes matched each other and Elder differed from them only at DYS413a,b in the last 30 markers. His results help to confirm the consensus ancestral haplotype.

Y-DNA testing had now supported that these Foxes were all one family, and we now had a good fix on the haplotype of Henry Fox 1st (Table 1). The genetic distances from the modal 37-marker haplotype were actually better than might have been expected given that Henry Fox 1st was an average of nine generations removed from each of the men tested.

In addition, Elder and a member of Group 1 have been haplogroup tested and are R1b-L47, a subclade of R1b-U106/S21. Haplogroups are defined

by single nucleotide polymorphisms (SNPs) at specific sites on the Y-chromosome that mutate rarely enough to define a timeline for the history of mankind (deep ancestry). Any other Foxes who are not in this particular subclade cannot be related within the last 4,000 years (MacDonald, 2014).

The Henry Fox 2nd Controversy

Only two sons of Henry Fox 1st and Anne West were mentioned in the will of their maternal grandfather, Colonel John West, the nephew of Thomas West, Lord De La Warr. Sons John and Thomas were named, but Henry Fox 2nd was not, perhaps because Henry Fox 2nd was first in line to inherit from his father's estate (King, 1961, p. 1). Nevertheless, considerable doubt about his paternity remained in the mind of researcher Ellen Cocke (1939) and others. In 1934, Ann Woodard Fox, wife of Edward Lansing Fox, founded "The Society of the Descendants of the Hon. Henry Fox and Anne West" that claimed they were the only "approved" Virginia line; descendants of Henry Fox 2nd were not permitted to join. Both Ellen Cocke and Edward Lansing Fox were of the Thomas Fox line. Ann Woodard Fox is best known for her treatise emphasizing the royal West family connections (AW Fox 1958). She does not even mention Henry Fox 2nd.

Later researchers, including Steadman (1972, pp. 28–30) and Frances Chan (1998), felt that the overwhelming evidence was in favor of Henry Fox 2nd truly being the brother of John and Thomas. Even genealogist George Harrison Sanford King, who was the registrar of the above Society, tended to agree. Nevertheless, the seeds of doubt had been planted. The Fox Surname Project is happy now to confirm that these later researchers were correct. The close correlation between the genetic test results of Groups 1 and 2 (descendants of Henry 2nd) and Group 3 (descendants of Thomas) has shown that they were all one family.

Richard Fox (1707–1771) of Mecklenburg County, Virginia, USA

Joseph Steadman (1972, pp. 38–42) devotes several pages to various claims as to the ancestry of Col. Richard Fox who married Hannah Williamson and left many descendants. Many claims had been made that Richard was the grandson

of Henry Fox 1st and Anne West, the son of either Henry Fox 2nd or Thomas Fox. A woman even used this lineage in an application to the Society of Colonial Dames (Steadman, 1972, p. 39). Steadman disagreed and concurred with George H. S. King (1960) that he was probably the only child of a George Fox of Surry County, Virginia, though the evidence was weak. The ancestry of Col. Richard Fox remains a mystery, but Y-DNA testing is quite definite: he was not a Henry Fox/Anne West descendant. Results for a descendant of his son Jacob and a descendant of his son William match each other on 36 out of 37 markers but are a complete mismatch with the Henry Fox/Anne West descendants. In fact, they are in an entirely different haplogroup (I-L39 vs. R1b-L47).

Perhaps a clue will eventually be found from another interesting Fox Project result. Several descendants of Joaquin Fox of New Orleans, Louisiana, USA, who moved to Mexico, are obviously related to these Richard Fox descendants. One of them matches on 66 of 67 tested markers with the William Fox descendant. Given that the descendants of Richard Fox and Hannah Williamson have been well researched, this connection may well predate Richard Fox himself, even though the match is close.

Fox of Abbeville, South Carolina, USA

Henry Fox 3rd had several other sons than Thomas by his first wife, Mary Goodwyn. One of these, John Fox, was born around the year 1729. He may have participated, along with his brother Henry, in the French and Indian Wars. Steadman (1972, p. 55) has also identified him to be John Fox, a private on the payroll of Captain Andrew Miller's Company from February 1779 through May 1780 in the Revolutionary War. In this case, the Y-DNA evidence has proven Steadman to be wrong.

In December 1781, after the truce at Yorktown, Virginia, Private John Fox was captured at Pratt's Mill on Long Cane Creek by Hezekiah Williams, a Tory leader, and carried to the Cherokee Nation where he was killed. His widow, Mary (Mollie) Fox, received payment of the amount due him for service and for articles of his that were lost at Pratt's Mill. She died in 1828, and in her will she mentions a son Matthew and four daughters. Matthew Fox, born in 1766, "in Abbeville District, S.C.", enlisted at age 15 as a soldier in the Revolutionary War (Graves, 2015). He later moved

to Newport, Cocke County, Tennessee, where he was living when he applied for a revolutionary war pension that confirms this information.

Matthew Fox and his wife Martha left many descendants, four of whom are in the Fox Project (Table 2, Group A). They descend from three different sons of Matthew: Anderson, William, and John S. Fox. Among 37 markers, there is only one deviation among the four of them, but they are definitely not descendants of Henry Fox and Anne West, differing by 17 or more markers (of 37) from that group. Being members of Haplogroup R1b-L1/S26, rather than Haplogroup R-L47, puts their common ancestor with the Fox/West family at thousands of years back (MacDonald, 2016). Instead, these Matthew Fox descendants are close matches at 67 or more markers with the British (Group B, Francis Fox descendants) and the American (Group C, Justinian Fox descendants) families described in detail in *Growing with America* (JM Fox, 2006, pp. 229–254). The group has now added a few more members and done more extensive testing.

A comparison of 37-marker mismatches for these three families is shown in Table 2. Josiah Fox, another of the British clan, came to America in 1793 and made a name as the designer of the *USS Constitution* (Westlake, 2003). One of his descendants was recently tested (2016), and his results are included as the third member in Table 2, Group B. He, too, had a genetic distance of 3 from the modal haplotype. The fourth member of this group was tested at 17 markers by Mark Jobling and Turi King at Leicester University in 2002. His results help define the modal values for DYS391 and DYS439. (NB: FTDNA originally read a null result at DYS439 for men in Haplogroup R1b-L1/S26 but assigned a value of 12. They changed their primer in 2014, and most of the earlier null results have now been verified as a value of 12 for the Fox group.)

Clearly, the Haplogroup R1b-L1/S26 Fox family has a higher mutation rate for their STR markers than the Henry Fox descendants (Table 1). Based on Table 2, one might expect Groups A and B to be more closely related. In fact, SNP testing has shown that Groups B and C most likely have the more recent common ancestor, confirming the genealogy trail.

With the advent of affordable Y-chromosome sequencing, we can now pinpoint the common ancestor of Groups B and C with some confidence. The Big Y test, offered by FTDNA starting in 2013,

Table 2. STR results (37 markers) for descendants of Matthew, Francis, and Justinian Fox. These men belong to haplogroup R1b-L1/S26.

Line of Descent ¹	Results for Markers that Differ ²								G.D. ³
	DYS 391	DYS 439	DYS 389ii	DYS 458	DYS 447	DYS 576	DYS 570	CDY a,b	
Group A: Matthew Fox (1766– ; Abbeville, SC)									
Matthew / Anderson / Matthew / James / +3 gen	11	12	29	17	25	18	17	38-38	0
Matthew / Anderson / Matthew / Henry / +2 gen	11	12	29	17	25	18	17	38-38	0
Matthew / William / +4 gen	11	12	29	17	25	18	17	38-38	0
Matthew / John / +4 gen	11	12	30	17	25	18	17	38-38	1
Group B: Francis Fox (1607– ; Wiltshire, Eng.)									
Henrie / Francis / Francis / George / George / +6 gen	11	12	29	17	25	17	17	38-38	1
Henrie / Francis / Francis / George / Joseph / +7 gen	12	12	29	17	25	17	17	38-38	2
Henrie / Francis / Francis / John / +7 gen	11	13	29	16	25	17	17	38-38	3
Henrie / Francis / Francis / Francis / +7 gen	11	12	29	n.a. ⁴	n.a.	n.a.	n.a.	n.a.	
Group C: Justinian Fox (1673– ; Plymouth, Eng.)									
Edward/ Justinian / Joseph / Joseph / +5 gen	11	12	29	18	26	18	16	38-38	3
Edward/ Justinian / Joseph / Samuel / +4 gen	11	12	29	17	26	19	17	38-39	3
Probable Ancestral Haplotype	11	12	29	17	25	18	17	38-38	

¹ Big Y™ testing showed that Groups B and C are more closely related, and Henrie Fox is their likely common ancestor.

² To protect the genetic privacy of the participants, only mismatches are shown. The remaining markers were identical.

³ G.D. refers to the genetic distance from the “ancestral” modal haplotype. It equals the number of mismatches from the modal since all these are single step deviations.

⁴ n.a.: data not available because the person did not test all 37 markers

uses targeted next-generation sequencing of around 11.5–12.5 million base pairs of non-recombining Y-DNA to reveal genetic variations across the Y chromosome. One member of each of the American Groups A and C and two members of the British Group B were tested (JM Fox, 2016). All four had 20 SNPs in common downstream from L1/S26, but the British pair had one more, named A955 by YSEQ (<http://yseq.net/>). In addition, the two members of Group B had three singletons (private SNPs not identified in other members of Haplogroup R1b-U106/S21) between them, and the member of Group C had two singletons, indicating a close relationship. The member of Group A had seven singletons. While SNPs are random, and the number of singletons can vary, this does point to a more distant relationship.

In *Growing with America – The Fox Family of Philadelphia*, a review of genealogical evidence indicated that:

- Edward Fox was the nephew of Francis Fox (JM Fox, 2006, pp. 28, 241, 265–285), and the common ancestor of Groups B and C was Henrie Fox of Devizes, Wiltshire, England, thought to be a cousin of Sir Stephen Fox.
- Matthew Fox may have descended from an older brother of Justinian Fox who came to Philadelphia on the same ship, in which case Henrie Fox would have been the common ancestor of all three groups (J Fox, 2006, p. 246–248).

The Big Y testing results have tended to support the former conclusion, but the latter is now open to question.

The common ancestor of the British pair was George Fox, born in 1693 in Cornwall, England. A reasonable estimate of the birth date of Henrie Fox would be $1607 - 44 = 1563$ (Francis, born in January 1606/07, was his 7th son). This is 130 years and three generations before George Fox, born 1693. Dr. Iain MacDonald (2016) has shown that 125 years per SNP best fits Big Y testing of Haplogroup R1b-U106/S21, of which R1b-L1/S26 is a subclade. Thus, the British pair could reasonably be expected to have experienced a SNP mutation in this time period. There is no reason to question Henrie Fox as the common ancestor of Groups B and C based on these results.

If the common ancestor of the American Foxes was Edward Fox of Plymouth, then their common ancestry back to Henrie Fox would have been two generations and about 80 years, during which time they might well not have experienced a SNP mutation. The high number of singletons for the Group A member, however, tends to suggest an earlier common ancestor.

Another interpretation is that Group A has a direct connection to Sir Stephen Fox. Burke's *Landed Gentry* says that Francis Fox was "stated to be of the same family as the celebrated Sir Stephen Fox, ancestor of the Earls of Ilchester and the Lords Holland" (Burke & Burke, 1847, p 441), and the Francis Fox family is permitted to use his coat of arms.

In his book on the Fox family, James Wallace Fox (1917, p. 8) relates several tales of how Sir Stephen's grandson, the politician Charles James Fox (1749–1806), corresponded with and sent gifts of jewelry to several Fox relatives of his in Virginia. This jewelry ended up in the hands of another Charles James Fox, a bachelor who was said to be the son of John and Grace Fox. Unfortunately, they all ended up in the possession of relatives named Moody or Montague and were lost or stolen. Could this actually be the Matthew Fox line that Steadman incorrectly identified as Henry Fox/Anne West descendants? The Big Y results suggest so. There are known descendants of Sir Stephen Fox living in England and, hopefully, further testing will tell the tale.

William Fox of Loudoun County, Virginia

Another Virginia Fox family that has often been confused with the Henry Fox/ Anne West family is that of William Fox, Sr., born about 1710 in Loudoun County, Virginia. The descendants of his son, William Fox, Jr., were well covered in a book by Nellie Fox Adams (Adams & Walton, 1998). John Fox, the author of *Little Shepherd of Kingdom Come*, the first American novel to sell 1,000,000 copies, was from this line.

This is also the family line of James Wallace Fox who wrote *Fox Family* (1917). At the end of this book, he mentions James Fox who married Mary Bartleson at Swede's Church in Philadelphia on 1 September 1758, but fails to connect him to William Fox, Sr. There is now good Y-DNA evidence that James Fox and William Fox, Jr., were brothers and

the sons of William Fox, Sr., and his wife Elizabeth.

Two project members (Table 3, Group 1) descend from William Fox, Jr., and one member (Group 2) descends from the James Fox who married Mary Bartleson. They are exact matches at 37 markers, confirming the relationship. The comparison is carried out to 67 markers in Table 3 to accommodate test results from others who appear to be related.

Joseph Steadman (1972, p. 19) has James Fox and his son Bartleson Fox as possible third- and fourth-generation descendants of John Fox, brother of Henry Fox 1st. As shown in Figure 1, John Fox was born about 1652 and reportedly married a Miss Lightfoot. Steadman guessed wrong. The two groups have a genetic distance of 23 based on 67 markers and this family is a predicted member of haplogroup R1b-L21. R1b-L21 is a subclade of R1b-P312 and any connection with the Henry Fox/Anne West line goes back at least 5,000 years (YFull Tree, 2016).

Group 3 in Table 3 includes two members whose lines of descent are not yet confirmed but who are undoubtedly related to the William Fox, Sr., family. They each match the Group 2 descendant on 66 of 67 markers. The John Fox (1780–1852) descendant is positive for the S1051 SNP and is a member of the R1b-S1051 Project, as is the first member of Group 1. R1b-S1051 is a subclade of R1b-L21 that may have originated in what is now Scotland. Both men also matched each other in the defunct Relative Genetics database of Ancestry.com (Lehi, Utah, USA).

The John Fox descendant originally proposed the following ancestry (personal communication): Henry Fox (Anne West) → Thomas Fox (Mary Tunstall) → Joseph Fox (Mildred Fenton) → Thomas Fox (Leah Lipscomb) → John Fox, Jr. ~1780 VA and KY (Elizabeth Hoffman). However, the family tradition was wrong, given his haplogroup. Based on the research of Kevin Daniel, who has an online Fox family tree (Daniel, 2001), and Jane Fox Wheldon, who has researched the Bartleson Fox line (personal communication), both John Fox and Enos Fox are thought to be later descendants of James Fox by his second wife.

Another pair of men in this lineage serve as an example of a match that requires further study. Two descendants of Hugh Fox, born about 1745 in Virginia, match the William Fox, Sr., descendants at 32 and 34 of 37 markers, respective-

ly (Table 3). The 32 for 37 marker match is also a 60 for 67 marker match. A third Hugh Fox descendant elected to test only 12 markers but confirms the mismatch at DYS389ii.

These less-close Y-DNA test results indicate that a possible long-range family connection may exist within a genealogical time frame. Further testing is recommended, and the S1051 SNP is an obvious choice for either joining or separating these two family lines. Current thinking is that all these Foxes may have come down to Virginia from Philadelphia or New Jersey, which may explain James' marriage back in Philadelphia.

William Fox (1710–1764) Who Married Sarah Avent

Perhaps the most interesting of the erroneous Fox relationships, because it had been so abundantly documented, is that of two descendants of William Fox of Virginia (b: 1710) and his wife Sarah Avent. In Shirley Faucette's (1972, pp. 119–124) comparison of the genealogists Steadman and Robinson, both have this William Fox as the son of Henry Fox 2nd. Steadman (1972, p. 28) comments:

“The said William Fox doubtless was that one who settled in Brunswick County (Virginia), being named as the son of Henry Fox 2nd and Mary Claiborne. He married Sarah Avent who was a granddaughter of William Gooch and his wife Ursula Claiborne. — See Joseph Emery Avent's 'The Avents and Their Kin of Avent Ferry, Chatham County, North Carolina.'”

We now have conclusive Y-DNA evidence that William was not the son of Henry Fox 2nd. With the help of Fox researcher Donald Fletcher, known descendants of two sons of William Fox and Sarah Avent, John and Thomas, were located. They have been tested on 37 markers and they differ at DYS385a,b, CDYa,b, and DYA442 (11-13, 37-37, and 16, respectively, for the descendant of John; 11-14, 37-39, and 14 for the son of Thomas). This large a difference is unusual but not unexpected for two men whose common ancestor is seven generations removed. A first cousin of the Thomas Fox descendant has been tested on 12 markers and is an exact match on the first 12, which includes DYS385a,b.

These men differ, however, on 17 or more out of 37 markers from our Henry Fox/Anne West descendants.

Table 3. STR results (67 markers) for descendants of William Fox, Sr. and Hugh Fox. These men belong to haplogroup R1b-L21.

Line of Descent	Results for Markers that Differ ¹								G.D. ²
	DYS 389ii	DYS 448	DYS 456	DYS 576	CDY a,b	DYS 578	DYS 557	DYS 444	
Group 1: William / William									
William / William / James / James / +4 gen	31	19	16	18	35-38	n.a. ³	n.a.	12	0
William / William / James / Rueben / +3 gen	31	19	16	18	35-38	n.a.	n.a.	n.a.	
Group 2: William / James									
William / James / Bartleson / +4 gen	31	19	16	18	35-38	8	16	12	0
Group 3: John and Enos Fox									
John Fox (b1780 VA, d1852 KY) / +5 gen	31	19	16	18	35-38	8	15	12	1
Enos Fox (b1814 KY, d1897 IA) / +4 gen	31	20	16	18	35-38	8	16	12	1
Probable Ancestral Haplotype for William Sr.	31	19	16	18	35-38	8	16	12	
Group 4: Hugh Fox Descendants									
Hugh / Hugh / James / +6 gen	30	19	17	19	36-37	9	16	13	
Hugh / Moses / Hugh / +5 gen	30	19	17	18	36-38	n.a.	n.a.	n.a.	

¹ To protect the genetic privacy of the participants, only mismatches are shown. The remaining markers were identical.

² G.D. refers to the genetic distance from the “ancestral” modal haplotype. It equals the number of mismatches from the modal since all these are single step deviations.

³ n.a.: data not available because the person did not test all 67 markers.

The John Fox descendant has been tested on 67 markers and differs from them on 24 markers. In addition he has 12 repeats at stable marker DYS492, and the Henry Fox/Anne West descendants have 13 repeats. This result points to haplogroup R1b-P312, whereas the Henry Fox/Anne West descendants are in the R1b-L47 subclade of R1b-U106. This would put their common ancestor back some 5,000 years (YFull Tree, 2016). The published information is wrong.

We are not even certain whom Henry Fox 2nd married. Shirley Faucette (1972, p. 121) states that, "Some sources list both wives, others show only one but vary as to whether it was Mary Kendrick or Mary Claiborne." It is quite possible that the Henry Fox who married Mary Claiborne was a different person than Henry Fox 2nd, son of Henry Fox 1st and Anne West.

Interestingly enough, William Fox and Sarah Avent were the grandparents of Sarah Harrell, the spouse of Henry Fox (1768–1852) of Webster County, Mississippi, ancestor of Group 1 of the Henry Fox/Anne West descendants. One of Henry Fox/Sarah Harrell descendants, Frances Cooke Chan (personal communication), writes, "I don't think anyone in our family ever felt that they (Sarah Harrell's grandparents) necessarily were in this Fox family, just that they had the same name and might have been relatives."

Andrew Fox (1749–1819) of Virginia and Tennessee

A classic example of how erroneous family trees gain credence is the tale of Andrew Fox, who first appeared in Culpeper County, Virginia, in 1772 and then showed up in Greene County, Tennessee, in 1786. Three of his descendants have been tested at 37 markers. None of them match our Henry Fox/Anne West descendants, and there is a genetic distance of 21 to 24 for the 37 markers.

Someone, however, had reported a connection to Henry Fox and Anne West via Henry Fox 2nd and Mary Kendrick, and then via a son named Jacob, a connection that managed to get into the files at the Family History Library (Salt Lake City, Utah, USA). Once there, the relationship was considered documented by many others and published on various internet sites. One classic

example is the Germanna Research site (Blankenbaker, 2008), which questions contrary evidence published by a researcher named John Fox (2004) and says Andrew may have been of German origin, yet still uses the Family History Library tree. The researcher John Fox had suggested that Andrew Fox was the son of a pauper named Anne Fox and came as an indentured prisoner to Culpeper, Virginia, in 1772 from Rutland, England.

James Fox, in his book *Tracking Andrew Fox* (2012), concludes that John Fox was correct. He says that Andrew Fox was indeed the illegitimate son of Anne Fox but thrived in America, serving in the Revolutionary War; marrying Sarah Render of Culpeper, Virginia; and acquiring 300 acres of property in Tennessee. The evidence is circumstantial, but Y-DNA testing tends to confirm this version over the others. Andrew Fox was definitely not a Henry Fox/Anne West descendant, and his father may not have been a Fox.

There is evidence for a possible non-Fox connection. A comparison at 37 markers between our three Andrew Fox descendants and a man with another surname who traces back to Scotland in 1898, is shown in Table 4. Significantly, the non-Fox matches the ancestral value for all markers except CDYa,b. This is a close match indeed and tends to confirm the Andrew Fox story, but further testing is required before we can confidently say that this is the connection. The non-Fox descendant has been tested out to 111 markers and his haplogroup assignment has been confirmed as R1b-DF13 (a subclade of R1b-L21) by SNP testing, a result possibly indicative of an ancient Scots/Irish ancestry. If one of our Andrew Fox descendants were to upgrade, the results might well solidify the connection.

Other Virginia Fox Families

More than a dozen other Fox Project members erroneously thought they might be descendants of Henry Fox and Anne West. This list includes a descendant of William Eires Fox (b. 1758 in Virginia), a descendant of Allen Fox (b. 1760 in North Carolina), a descendant of John Fox (b. ca. 1705–15 in Essex County, Virginia), two descendants of John B. Fox (b. 1745 in Orange County, Virginia) and his wife Ann Barber, and two descendants of William Fox (b. 1836 in Warwick County, Virginia), whose parents were William Fox and Nancy Stacy.

Table 4. STR results (37 markers) for descendants of Andrew Fox of Virginia and Tennessee. The non-Fox belongs to haplogroup R1b-DF13, a subclade of R1b-L21.

Line of Descent	Results for Markers that Differ ¹				G.D. ²
	DYS 449	DYS 576	DYS 570	CDY a,b	
Andrew / Jacob / Matthias / +5 gen	28	20	19	36-38	2
Andrew / Jacob / Joseph / +4 gen	28	18	18	36-40	2
Andrew / Jesse / +5 gen	29	19	18	36-38	1
Non-Fox (Scotland 1898)	28	19	18	36-37	1
Probable Ancestral Haplotype	28	19	18	36-38	

¹ To protect the genetic privacy of the participants, only mismatches are shown. The remaining markers were identical.

² G.D. refers to the genetic distance from the “ancestral” modal haplotype. It equals the number of mismatches from the modal since all these are single step deviations. Mutations in multicopy marker CDYa,b are considered a single step.

Conclusions and Recommendations

As we have seen, 37 markers can be sufficient to deny a relationship and can confirm one when a paper trail is available and multiple descendants are tested. When there is no paper trail and the surname differs, additional DNA testing is required.

There must be hundreds of erroneous Fox genealogies posted on the internet that rely on sources mentioned here. This paper cannot resolve all these problems but perhaps makes a good start. As the public comes to realize the power of genetic surname testing, they will hopefully correct most of these errors. Those whose connection to Henry Fox and Anne West was disproven have already defined new goals for their research. Those whose connection was proven can rejoice that a contentious issue has finally been settled.

Many challenges remain, and perhaps this paper will spur more people to help resolve them. The many Virginia John Foxes remain something of a mystery. As mentioned previously, Henry Fox 1st had a brother named John Fox who married a Miss Lightfoot. Hopefully, there is a direct male descendant of this line we can locate and test. The English ancestry of Henry Fox 1st is an important unanswered question, as is the relationship of the Haplogroup R1b-L1/S26 Foxes to Sir Stephen Fox.

Ann Woodard Fox took the ancestry of Henry Fox 1st back to England, and Joseph E. Steadman (1972, pp. 3–11) later made a comprehensive review of what is known about the British ancestry of Henry Fox 1st. He was the son of John Fox, a sea captain who also settled in Virginia in 1661, and this line has been tentatively traced back to Henry Fox (1521) who married a Hawes of Missenden and possibly to a William Fox (1497–1559) of Missenden, Buckinghamshire, who lived at Stewkley Manor (J William Fox, 2004).

A William Vaux, descended from a Norman Invader named Robert de Vaux, is known to have inherited Stewkley Manor by marriage in 1424. Some researchers question a change from Vaux to Fox but, if a Fox/Vaux connection could be substantiated, this would carry the line back to 1066.

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Conflicts of Interest

The authors declared no conflicts of interest. Joe Fox is a retired Process Design Manager at Bechtel, Inc., San Francisco, CA, USA, and the administrator of the Fox Y-DNA Surname Project at FTDNA.

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