

Book 3
Genetic Matches of Descendants of Aaron Stark
To Those With Different the Surnames

By Clovis LaFleur; September 2013 - 1st Edition

Abstract

At the 8th Annual Genetic Genealogy Conference (Nov. 2012), hosted by Family Tree DNA in Houston, Texas; Dr. Tyrone Bowes was invited to make a presentation entitled: "Pinpointing A Geographical Origin." He presented a 6 step approach using FTDNA's 37 marker genetic matches to surnames differing from the surname of interest. The Steps outlined were: 1) Order A DNA Test; 2) View the surnames of those you match over 37 markers; 3) Review the surnames that reoccur; 4) View surname distribution maps of reoccurring names; 5) Use census data (1841 UK Census) to Pinpoint places of residence or reoccurring surnames; and 6) Use Google Map to observe clusters of your surname and the matching reoccurring surnames.

Reported here is an analysis of a member of the Stark Family Y-DNA Project descending from Aaron Stark [1608-1685] — *having the Modal 67 marker Haplotype for this group* —; his genetic results compared to the FTDNA Y-DNA database to find genetic matches. Of the 10 matches found, eight were members of the Stark Project, with genetic distances ranging from 0 to 3; all proven genetically and genealogically to share Aaron Stark [1608-1685] as a common ancestor. One match was to the surname Taylor (GD=5) while the other was a match to the surname Withers (GD=7). Earlier, the Taylor match had joined the Stark Project due to his close 67 marker match.

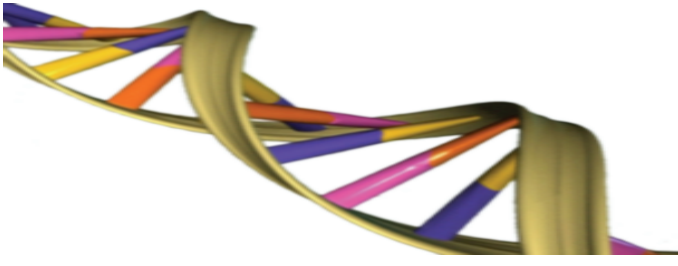
A 37 marker search of the FTDNA database for matches to the above descendant of Aaron Stark returned 48 matches. [Over 37 markers, FTDNA only presents matches with a genetic distance of 4 or less.] The majority (28) of these matches were known and proven descendants of Aaron Stark. Of the twenty matches with different surnames, Hobbs (1), Land (7), and Taylor (2) were reoccurring. Although Hobbs occurred only once, as will be revealed later, this surname occurred quite often over 67 markers for the Taylor Member who joined the Stark Project.

Investigating the surnames Stark, Taylor, Withers, Land, and Hobbs, the following will use the Methodology outlined by Dr. Bowes to attempt to pinpoint the geographical origins of these genetically matching surnames.

Disclaimer

As a Volunteer Surname Y-DNA Project Administrator, I am not responsible for the genealogical material provided by members nor am I responsible for the Test Results publicly reported by FTDNA. The analysis of results prepared and presented on these pages are based on my interpretation of the Y-DNA results and genealogy provided by FTDNA and project members.

Clovis LaFleur
09/14/2013



Book 3
Genetic Matches of Descendants of Aaron Stark
To Those With Different Surnames
 By Clovis LaFleur; September 2013 - 1st Edition

Introduction

In Group 1 of the Stark Family Y-DNA Project, a member descending from Aaron Stark [1608-1685] who is a perfect match to the 67 marker Modal Haplotype for this Group, was selected to search the FTDNA Y-DNA database for genetic matches over 67 markers. The search for matches returned ten matches — *8 of the matches known descendants of Aaron Stark*. These matches have not been included in the discussion that follows for our interest in this analysis with be matches to different surnames. Mr. Taylor and Mr. Withers were the other two matches over 67 markers. These matches are listed below in Table 1. Mr. Taylor had a genetic distance of 5; while Mr. Withers had a genetic distance of 7.[1]

I then looked at the 37 marker Match list for our Stark Project member selected above (whom we will refer to as Mr. Stark). [3] There were 48 matches total. 29 of the matches were members of Groups 1a & 1b; descendants of Aaron Stark; with genetic distances of 0 to 3. As you would expect, 8 had been tested over 67 markers; while 21 had only been tested over 37 markers — *this the reason 21 of those matching at 37 markers did not match at 67 markers*. There were 18 total matches to different surnames; none with a genetic distance less than 2 nor greater than 4. Surnames were: Canaafax (1); Gardner (1); Hepworth (1); Hobbs (1); Kenefick (1); Land (7); Lockler (1); Norrick (1); Pomeroy (1); Taylor (2); White (1); Withers (1). Observe Taylor and Land were the only surnames having more than one match at 37 markers.

There can be two reasons most of these surnames, other than Mr. Taylor and Mr. Withers, did not appear as matches to Mr. Stark over 67 markers. First, many were not tested beyond 37 markers. Second, all of those tested over 67 markers except Mr. Taylor and the surname Withers, had genetic distances great than 7. The Mr. Withers who matched over 67 markers was not the same Withers surname included in the matches over 37 markers; suggesting Mr. Withers most likely had a Genetic distance greater than 4 over 37 markers, but not greater than 7 when compared over 67 markers. [1,2] FTDNA TiP calculations were run on all in the match list who tested over 67 markers. [3] One in the Land surname group in the match list with a genetic distance of 8 or greater had a 90% probability of sharing a common ancestor within 24 generations; another was Mr. Hobbs. All of the others must have had a considerable number of mismatches over markers 38 thru 67, for the Tip Calculations at 24 generations were well below 90%, most less than a 50% probability.

Therefore, based on the above, Mr. Taylor and Mr. Withers from the 67 marker list were included in our investigation. Mr. Land and Mr. Hobbs from the 37 marker match list were added based on their 67 marker Tip comparisons to Mr. Stark.

Mr. Taylor joined the Stark Project and was compared to the Y-DNA database; returning 53 total matches over 67 markers. Hobbs (4) and Stark (5) were reoccurring surnames. The Mr. Hobbs selected for the Mr. Stark list in Table 1, was one of the Hobbs in Mr. Taylor's genetic match list. The same Mr. Withers was a match to Mr. Taylor; his match to Mr. Taylor having a genetic distance of 2. All of the surnames in Table 1 were observed in the 37 & 67 marker database matches to Mr. Stark and Mr. Taylor and will be evaluated in the analysis that follows.

Table 1 - Different Surname Matches to Aaron Stark Descendant

GD	Surname	Search	Most Distant Ancestor	Haplogroup	Terminal SNP
5	Mr. Taylor	67M	Christopher Taylor Sr. d. 1644 No. Yorkshire, ENG	----	----
7	Mr. Withers	67M	Thomas Withers, 1787 - 1879, London	R1b1a2a1a1a	U106
>7 [4]	Mr. Land	67M	Samuel Land, b. 1510	----	----
>7 [4]	Mr. Hobbs	67M	James Hobbs, 1776 - 1849	R1b1a2a1a1a3	L1

- 1) 67 Marker searches for matches will only return matches with a genetic distance of 7 or less.
- 2) 37 Marker searches for matches will only return matches with a genetic distance of 4 or less.
- 3) The FTDNATiP™ results are based on the mutation rate study presented during the 1st International Conference on Genetic Genealogy, on Oct. 30, 2004. The calculated probabilities take into consideration the mutation rates for each individual marker being compared. Since each marker has a different mutation rate, identical Genetic Distances will not necessarily yield the same probabilities. In other words, even though XXXX has a Genetic Distance of XXXX from XXXX, someone else with the same Genetic Distance may have different probabilities, because the distance of 1 was prompted by mutations in different markers, with different mutation rates.
- 4) The GD Column is the Genetic Distance reported in the search list of matches. Mr. Hobbs and Mr. Land were matches found in the 37 marker match searches. Because they were not found in the 67 marker match searches, Table 1 reports their Genetic Distance as “>7.”

What do Generations mean in Calendar Years

On June 11, 1673, Aaron Stark [1608-1685] gave a deposition recorded in the Stonington, Connecticut, Town Records, which gave his age as sixty-five “or thereabouts,” providing us with the clue that his year of birth was about 1608.[1] Appendix 3; Table 3, is a genealogical lineage table clearly showing Aaron Stark was born 10 generations in the past relative to those of his 28 descendants genetically tested over 37 markers and presented. Geneticists traditionally advise 25 year generational intervals. By observation, if we add 250 years to the birth year of Aaron in 1608 (covering the 10 generations presented in Table 3), then the average birth year of the genetically tested participants would have to be 1858. Obviously, a 25 year generational time interval can't be correct for *this family* based on the genealogy of Aaron's genetically tested direct line male descendants.

Table 3 is a presentation of the Lineages of each of the members of Group 1 tested over 37 markers. Column 2 reports the Genetic Distance relative to the 37 marker Aaron Stark Modal Haplotype; and the Mean (average) generational interval in years for each lineage. For example, Member A1a has an ancestor (Samuel G. Stark) reported as born in 1888 in Generation 2. Aaron Stark was born in 1608. Counting back in generations from the father of Samuel G. Stark to Aaron Stark, we arrive at a count of 8 generations. [2] Subtracting the calendar year 1608 from the calendar year 1888 results in 280 years. 280 years divided by 8 generations equals a mean (average) generational time interval of 35 years *along the line of descent of Member A1a*.

Observe in Column 2 the generational time intervals have a minimum of 29.2 years and a maximum of 39.6 years. The mean (average) in years of all of the descendant lines comes to approximately 34 years. Therefore, this generational time interval of 34 years over 10 generations is based on actual observations from 7 to 9 generations in each line of descent. Adding 340 years to the calendar year 1608 results in the calendar year 1948 for the Zero generation in Table 3; a more reasonable time interval for those genetically tested.

Related to this observation, James M. Irving reported: “*My own research shows nine pedigrees dating from 1323 and 1660, with wide ranges of socioeconomic backgrounds, have intervals of between 31 and 38 years.*” [3] According to the Stark Y-DNA Project genealogy, Aaron Stark [1608-1685] was the progenitor of all of his descendants Y-DNA tested. That he is the common ancestor of all those presented in these Table 3 lineages and lived 10 generations in the past is well documented. Further, as the genealogical records have revealed, we can be certain Aaron most likely was a descendant of Commoners who lived in England before him. [4]

Genealogical Time

In the analysis of Y-DNA results, genealogical time is defined as the period after surnames became common for males. Once established, the surnames were inherited by the sons of the fathers and passed from one generation to the next. In this study, we will be investigating genetic matches of persons having different surnames. In England, when did the use of surnames become common practice? We are especially interested in Commoners in English society. The following quote is a summation of Ralph Taylor's article entitled: “*History of English Common Surnames.*” [5]

Quote

We have, hopefully, shown that surname practice in England followed this progression:

- Surnames (i.e., hereditary family names) had begun in the Norman nobility by the 1086 Domesday Book and become more common among them by the 1215 Magna Carta.
- Though bynames may have been widespread, surnames were not generally used by commoners before the Plague of 1348/1349.
- The Plague of 1348/1349 — *a catastrophe of epic proportions* — was an immense upset to the old order and a threat to all social order, requiring new means of dealing with a freer population. Surnames for everyone, including commoners, was one of those means.
- There was at least some use of surnames by commoners by 1367.
- The Poll Tax, beginning in 1377, requires the ability to identify every person, in order to record who's paid and who's not. Surnames would be a critical aspect of the identification.
- Surnames were a well-established practice for everyone including commoners by 1400.

We believe the process of surname adoption by English commoners (in contrast to the nobility) was rapid, within a span of five decades or less.

- The evidence suggests that no commoners -- or almost none -- had surnames before 1349.
- It is generally accepted that almost all had surnames by 1400, a span of 51 years.
- It is likely that most had surnames by the Poll Tax of 1377, a span of 28 years.

End Quote

1) The deposition, dated June 11, 1673 states: "The Testimony of Aron Starke Aged Sixtie five yeares or thereabouts..." From this statement we can estimate Aaron was born in about the year 1608 but the exact year of birth is not known with certainty. {Stonington, New London County, Connecticut Deeds 1664-1714, Book 2, page 280, June 11, 1673. LDS Microfilm Film #5593, transcribed by Gwen Boyer Bjorkman.}

2) Generation count backwards in time always begins with a count of zero with the son of a father; and a count of 1 with father of that son.

3) I note that James M. Irvine in his article entitled, "*Towards Improvements in Y-DNA Surname Project Administration*" (Section 3.1, page 7)," on this subject quoted the research of others and his own observations: "*For male generational intervals during the past millennium, Devine quoted historical studies of 31-38 years, 35, 32, and 34 years. King & Jobling adopted 35 years. The earliest pedigree in the Cruwys project shows average intervals of 30-35 years. The Williams project finds 28-33 years. My own research shows nine pedigrees dating from 1323 and 1660, with a wide range of socioeconomic backgrounds, have intervals of between 31 and 38 years.*"

4) "*The Life & Times of Aaron Stark.*" by Clovis LaFleur. You can find this biography at:
URL: <http://freepages.genealogy.rootsweb.ancestry.com/~clovis/v1chapter2.htm>

5) "*History of English Common Surnames.*" by Ralph Taylor. You can find this article at:
URL <http://freepages.misc.rootsweb.ancestry.com/~taylordna/surname-theory.shtml>

Using the logic suggested in the article, let us assume surnames were a well established practice for everyone including commoners by 1400. For the analysis that follows, — *as a result of our observations of Aaron's descendants* — we can say with confidence 34 years was the average generation time interval for a generation from Generation Zero through Generation 10. We will presume the same generation time interval for Aaron's direct line male ancestors to Generation 24 — *but we cannot say with certainty this would have been correct for Generations 11 through 24.* [1]

If genealogical time begins in the calendar year 1400, then relative to Aaron's descendants genetically tested, we must subtract the calendar year 1400 from the calendar year 1948 to obtain the number of years. Dividing 548 years as the number of years for genealogical time to have prevailed, by the 34 year generation time interval; results in 16.12 generations, or approximately 16 generations. Because we know Aaron was born in Generation 10[1608], by subtracting 34 years from the calendar year 1608; we can say with some measure of confidence, Aaron's father was born in Gen 11[1574]. Using the same reasoning, we can be confident Aaron's grandfather was born in Gen 12[1540]. Continuing through each generation of Aaron's male ancestral line, we can predict Aaron had a direct male ancestor who was born in Generation 15[1438] — *most likely having the surname Stark by this generation* — and another born in Gen 16[1404], Aaron's first ancestor, *in theory*, with the surname Stark. This last ancestor may not have been the first with the surname Stark, but he certainly could have inherited the surname from his father or an earlier ancestor.

A FTDNA FAQ page defines distant past genealogical time as 1 to 15 generations. [2] While this definition is based on males with the same surname, would it not also apply to all males with different surnames? Assuming no non-paternal events, if all males in English society had surnames by 1400 — *and all males born from that year to the present inherited those surnames* — would it not, then, be logical to expect all males with *different surnames* cannot share a common male ancestor today within genealogical time? Most likely not a completely true statement for a number of reasons that will not be discussed, but for this analysis, we will presume no males in our match list with different surnames to be genetically compared to Mr. Stark — *could have shared a common ancestor within 16 generations.*

The following would be correct **Conditional** statements if based on the above discussion.

1. We know those with different surnames listed in Table 1 that will be genetically compared to Mr Stark — *cannot share a common ancestor with Mr. Stark in the past 10 generations.*
2. If we presume English surname usage became fully accomplished by Gen 15[1438] relative to Mr. Stark; then, according to the generation time interval of 34 years introduced earlier — *those with different surnames could not share a common ancestor with Mr. Stark in the past 15 generations.*
3. If those with different surnames genetically matching Mr. Stark cannot share a common ancestor in the past 15 generations with Mr. Stark — *then they cannot share a common ancestor WITHIN Generation 16[1404], but can share a common ancestor in Generation 16[1404].*

Chart 1: FTDNATiP Calculations Time to Most Recent Common Ancestor Calculations (TMRCA) [3]

This analysis will presume the above 34 year generation time interval to approximate the average generation time interval of Aaron's direct line male ancestors. By subtracting 34 years from the calendar year 1608, the average year of birth of Aaron's father in Generation 11 would have been the calendar year 1574. Chart 1 will present generations 10 through 24, starting with the Calendar Year 1608 and ending with the calendar year 1132. The Chart 1 TMRCA calculations were performed by comparing Mr. Stark to each member of his Match list of surnames presented in Table 1. Following are general explanations related to Chart 1.

- ✓ Using FTDNA TiP Calculations to determine TMRCA, Chart 1 presents graphs that are functions of the probability Mr. Stark shares a common ancestor with each member in Table 1 WITHIN a specific generation.
- ✓ The X axis of Chart 1 presents the Generation and Mean Calendar Year for that generation based on the above mean generation time interval. Observe the Chart begins with Generation 10 and the calendar year 1608 and ends at Generation 24 and the Calendar year 1132.
- ✓ The Y axis presents the probability in percent that two individuals compared share a common ancestor WITHIN a generation presented on the X-axis.
- ✓ The 'Legend' presents the individuals compared and color codes of each Chart 1 graph. The Red graph, T/W, is a function of the comparison of Mr. Taylor to Mr. Withers; Green graph, S/T, is a function of the comparison of Mr. Stark to Mr. Taylor; Blue graph, S/W, is a function of the comparison of Mr. Stark to Mr. Withers; Pink Graph, S/L, is a function of the comparison of Mr. Stark to Mr. Land; and the Black graph, S/H, is a function of the comparison of Mr. Stark to Mr. Hobbs. Each graph moves from left to right in the order of their above color code descriptions.

The FTDNA*TiP calculations can be refined if the genealogy clearly reports two individuals could not have a common ancestor within a known number of past generations. Because it is known with near certainty Mr. Stark **could not have shared a common ancestor** with his different surname matches in the past 10 generations, the Chart 1 graphs are functions of these refined calculations from Generations 10 to Generation 24.

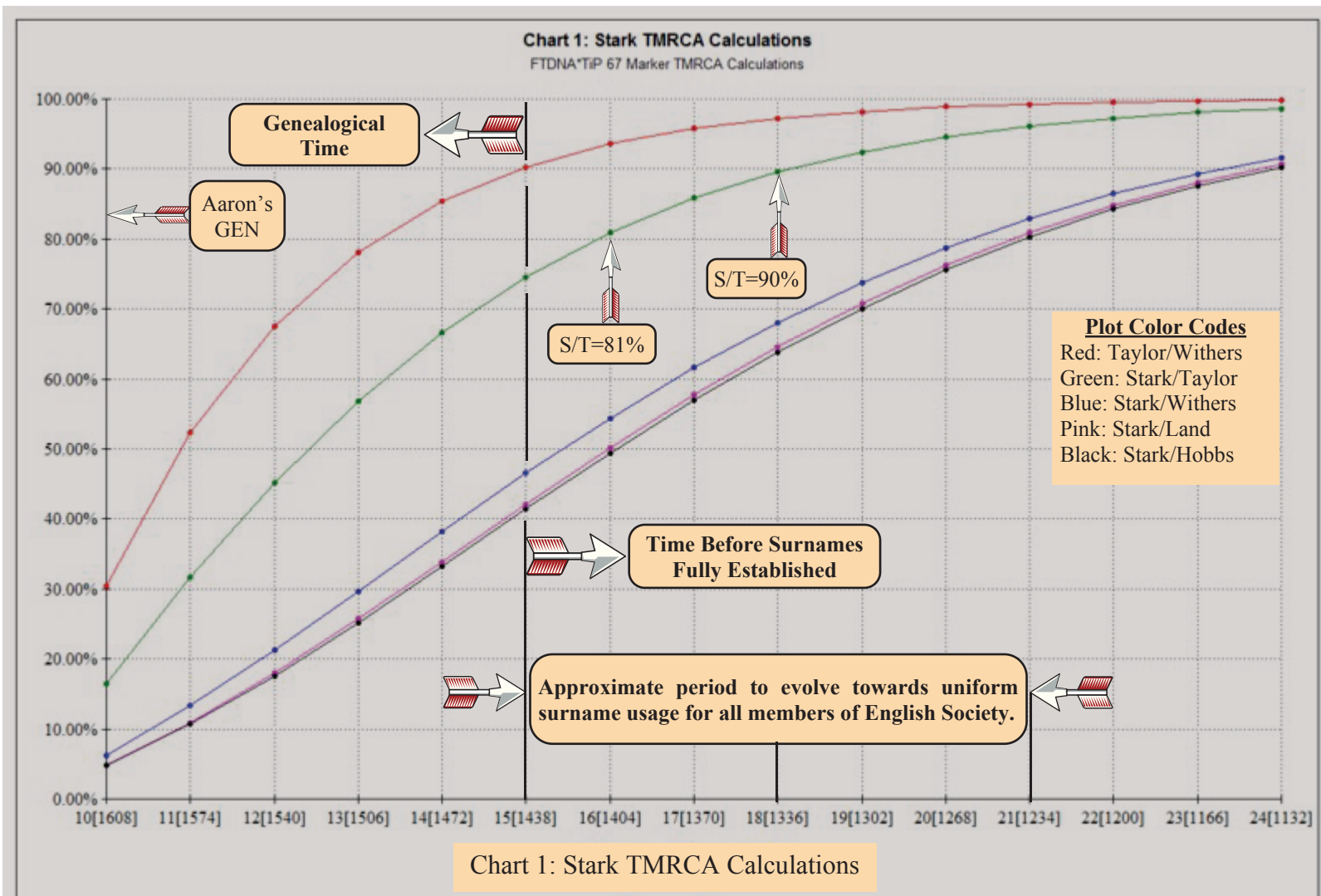
-
- 1) Perhaps as more data is collected over time with even earlier pedigrees, an average approximating 34 years will become the norm over 20 generations.
 - 2) FTDNA FAQ ID: #919, URL: <http://www.familytreedna.com/faq/answers.aspx?id=9#919>
 - 3) The FTDNATiP™ results are based on the mutation rate study presented during the 1st International Conference on Genetic Genealogy, on Oct. 30, 2004. The calculated probabilities take into consideration the mutation rates for each individual marker being compared. Since each marker has a different mutation rate, identical Genetic Distances will not necessarily yield the same probabilities. In other words, even though XXXX has a Genetic Distance of XXXX from XXXX, someone else with the same Genetic Distance may have different probabilities, because the distance of 1 was prompted by mutations in different markers, with different mutation rates.

According to the GREEN graph in Chart 1, we can say with some measure of confidence there is a 81% probability Mr. Stark and Mr. Taylor could have shared a common ancestor within Gen 16[1404]; and a 90% probability within GEN 18[1336]. However, Conditional Statement 3 suggests Mr. Stark & Mr. Taylor cannot share a common ancestor in Gen 15[1438]. Therefore, assuming Statement 3 is correct, it is more likely Mr. Stark and Mr. Taylor share a common ancestor in Gen 16[1404] or Gen 17[1370]. [1] Because Aaron's ancestors were most likely commoners, it would seem more realistic surname usage evolved over a number of generations greater than Gen 15[1438]; perhaps before and after the English Poll Tax of 1377 was introduced in Gen 17[1370]. Gen 18[1336] is suggested as an average generation centered within about two centuries — *this providing a time interval for uniform surname usage to be applied throughout English Society.* [1]

According to the BLUE graph in Chart 1, there is a 79% probability Mr. Stark and Mr. Withers share a common ancestor within Gen 20[1268]; and a 89% probability within Gen 23[1166]. Comparisons of Mr. Stark to Mr. Land and Mr. Hobbs are approximately the same, although with slightly less probabilities for Gen 20 thru Gen 24.

From the earlier discussion, it was found Mr. Stark and Mr. Taylor both had matches to Mr. Withers over 67 markers. There was a genetic distance of 2 in the Mr. Taylor match to Mr. Withers; and a genetic distance of 7 in the Mr. Stark match to Mr. Withers. According to the RED graph in Chart 1, there is a 78% probability Mr. Taylor and Mr. Withers share a common ancestor within Gen 13[1506]; and a 90% probability within Gen 15 [1438]. However, Statement 3 suggests the common ancestor was more likely to have been born in Gen 16[1404] — *or within Gen 17[1370] having a probability of 94%.* With these observations, let us now attempt to construct a **Family Tree**.

1) "History of English Common Surnames," by Ralph Taylor. His timeline approximates this same interval: You can find this article at: URL <http://freepages.misc.rootsweb.ancestry.com/~taylorydna/surname-theory.shtml>



Family Tree Construction

For reference, the following quote is Ralph Taylor’s summation of his article entitled: “*History of English Common Surnames.*”

Quote

We have, hopefully, shown that surname practice in England followed this progression:

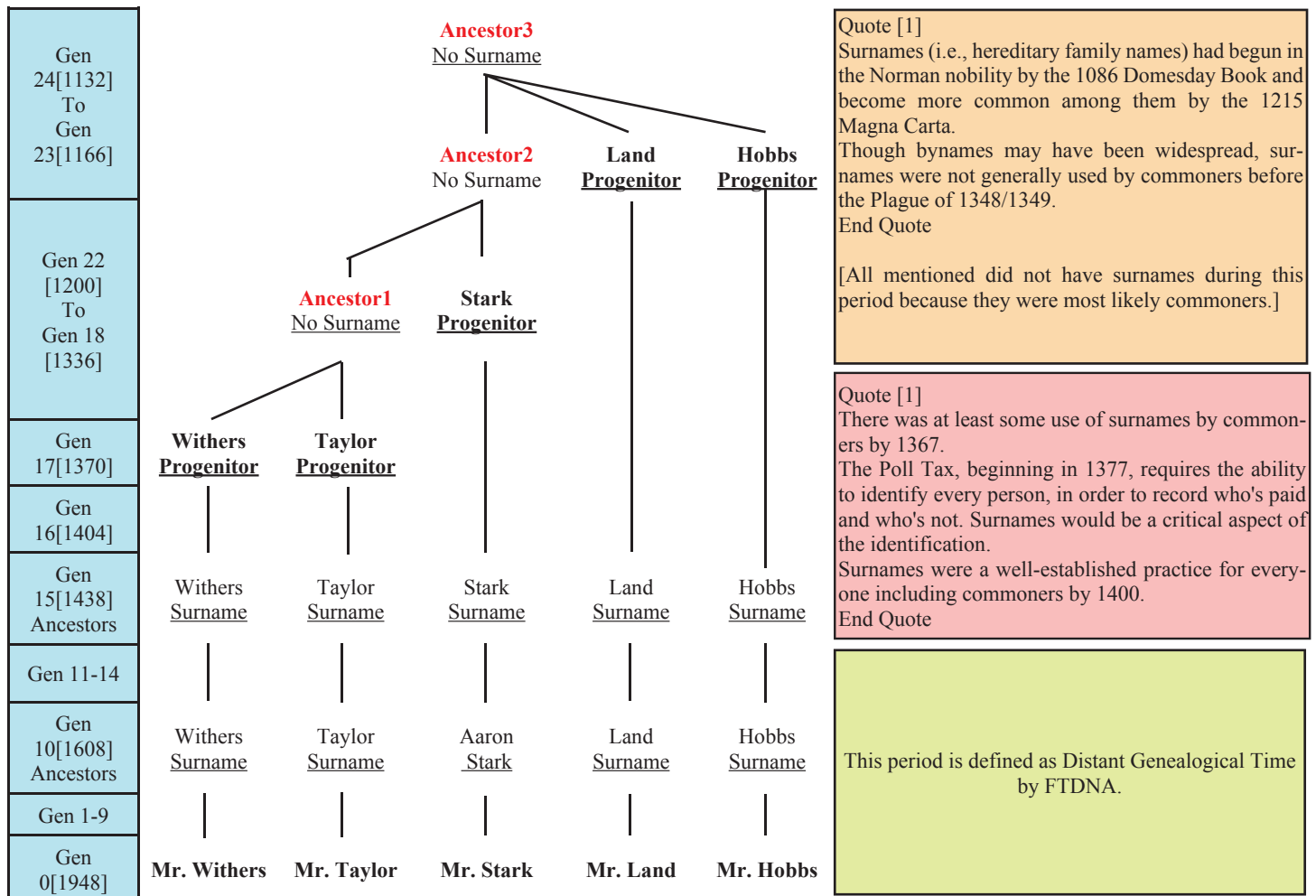
- Surnames (i.e., hereditary family names) had begun in the Norman nobility by the 1086 Domesday Book and become more common among them by the 1215 Magna Carta.
- Though bynames may have been widespread, surnames were not generally used by commoners before the Plague of 1348/1349.
- The Plague of 1348/1349 — *a catastrophe of epic proportions* — was an immense upset to the old order and a threat to all social order, requiring new means of dealing with a freer population. Surnames for everyone, including commoners, was one of those means.
- There was at least some use of surnames by commoners by 1367.
- The Poll Tax, beginning in 1377, requires the ability to identify every person, in order to record who's paid and who's not. Surnames would be a critical aspect of the identification.
- Surnames were a well-established practice for everyone including commoners by 1400.

We believe the process of surname adoption by English commoners (in contrast to the nobility) was rapid, within a span of five decades or less.

- The evidence suggests that no commoners -- or almost none -- had surnames before 1349.
- It is generally accepted that almost all had surnames by 1400, a span of 51 years.
- It is likely that most had surnames by the Poll Tax of 1377, a span of 28 years.

End Quote

The following would be an approximate *Family Tree* based on the above article timeline and our TMRCA Chart 1.



The Family Tree

In the past 15 generations, Mr. Stark did not share a common ancestor with any of those in his selected genetic matches having different surnames. By the Calendar Year 1438, surname usage was most likely completed for all members of English society. From our earlier discussion and the TMRCA Chart, we can conclude all of the Gen 15[1438] ancestors had the surnames of their descendants who have been genetically tested. [1,2]

From the TMRCA Red graph, there is a 94% probability Mr. Taylor and Mr. Withers could share a common ancestor within Gen 16[1404]; 96% within Gen 17[1370]; and 98% within Gen 18[1336]. While they cannot share a common ancestor in Gen 15, they can share a common ancestor in Gen 16. [3] Therefore, it would be possible Mr Taylor and Mr. Withers shared a common ancestor in any of these generations, including Gen 18 [1336]. The **Family Tree** presents this ancestor as “Ancestor1.” This was most likely an ancestor of Mr. Withers and Mr. Taylor who was a commoner without a surname and he could have been born in any of the suggested generations. This common ancestor most likely had two sons, one the progenitor of the Taylor branch to Mr. Taylor; and the other the progenitor of the Withers branch to Mr. Withers. The **Family Tree** suggests the inherited surnames were in place by Gen 15[1438].

From the TMRCA Green graph, there is a 90% probability Mr. Stark and Mr. Taylor could share a common ancestor within Gen 18[1336]; 93% within Gen 19[1302]; and 95% within Gen 20 [1268]. This suggests Ancestor1 most likely shared a common ancestor with one of Aaron Stark’s ancestors, referred to in the **Family Tree** as “Ancestor2.” As presented, Ancestor2 had two sons, one the progenitor of the Stark branch to Mr. Stark; and, as illustrated, Ancestor1 — *the earliest common ancestor of Mr. Withers and Mr. Taylor*. This would explain why Mr. Taylor had a genetic distance of 2 when compared to Mr. Withers; and why Mr. Stark had a genetic distance of 7 when compared to Mr. Withers. Ancestor2 could have been born by Gen 18[1336], as presented on Chart 1. From the TMRCA Blue graph, there is a 89% probability Mr. Stark and Mr. Withers share a common ancestor within 23 generations; suggesting Ancestor 2 could have been born in Gen 17[1370] and as early as Gen 22[1200].

The Pink graph and Black graph of Mr. Land and Mr. Hobbs, respectively, results in approximately the same probability values; there being a 90% probability they share a common ancestor with Mr. Stark within Gen 24[1132]. The **Family Tree** shows Mr. Land and Mr. Hobbs, and Ancestor 2 could share Ancestor3 as a common ancestor in Gen 24 [1132]. Chart 1 and the **Family Tree** suggests there is a range of Generations in which Ancestor1 thru Ancestor3 could have been born. However, it seems quite likely all were born after the calendar year 1132 and before the calendar year 1438.

One could make the case the common ancestor of Mr. Withers and Mr. Taylor, Ancestor1, was born after surnames were fully established. Although the introduction of the Poll tax in 1377 hastened the adoption of surnames for Commoners, we cannot exclude the possibility surnames originally taken by 1400, may have been changed at a later date within distant genealogical time. The Plague continued to reduce population and caused populations to relocate, while religious persecution could certainly have caused changes in location; both possible reasons to change one’s original surname.

In Conclusion

It would seem most unlikely parallel branch descendants of the Branch Progenitors of Mr. Hobbs and Mr. Land would have still been living in the same place when the 1841 English Census was taken. The time span would have been about 680 years, or about 20 to 21 generations. Therefore, we are looking for different descendant branches of these progenitors still living in the same places as our Mr. Land and Mr. Hobbs ancestral branches. The same would also be true for Stark, Withers, and Taylor. However, relative to the 1841 English Census, it’s possible the the number of generations of separation could have been as little as 233 years (about 7 generations) and as great as 403 years (about 12 generations). We will find the surname Taylor was very common by 1841 (not unexpected); while the surnames Stark and Withers, were less common at that time. Total Males of all ages found living in England with surnames of interest were: Stark (459); Taylor (49,588); and Withers (1,136). Our surname distribution, presented in Appendix 1: Table 2, focused on males in the age range of 20 to 82 years. Numbers of males in the age ranges of 20-40, 41-61, and 62-82, were recorded for each English County; this approximately representing 2 to 3 generations. [Also, see Appendix 2: Map 1, Distribution of Stark/Withers Surnames Historical English Counties]

The 1841 census ask if the person enumerated was born in his County of residence. In each of our age ranges, we only counted those reporting they were born in their County of residence. Table 2 in the Appendix is a distribution of these surnames within the search criteria specified above: 1) by age range; 2) by English County; and 3) born in the County of residence. The County cells with a Gray background could be possible Aaron Stark ancestral origin candidates. The candidates with a Green background may be possible, but with less likelihood than the Counties in Gray. Those without a background color would appear to not be likely to match the criteria because one or more of the surnames were not present in the County.

After completing Distribution Table 2 and Map 1, it appears to be difficult to determine Aaron’s place of origin without obtaining Y-DNA samples of living Stark males in the Counties of interest. Another problem with this analysis is the apparent uniqueness of the 67 marker Haplotype of Aaron Stark. Perhaps, as the FTDNA database increases and we find more recent matches, we can resolve these issues. Aaron’s descendants have been confirmed to be R-U106 positive suggesting a possible link to the Germanic Tribes that settled in southern England by 800AD. Our Distribution Map of the 1841 Stark males clearly reveals many men with this surname were living in southern regions of England. Another region of interest were the Counties of Norfolk, Lincolnshire, and Yorkshire, on the East coast. We await more Y-DNA data, genealogical research, and Historical research, before any further continuance of this line of analysis.

- 1) Conditional Statement 1: We know those with different surnames listed in Table 1 for Mr Stark — *cannot share a common ancestor with Mr. Stark in the past 10 generations.*
- 2) Conditional Statement 2: If we presume English surname usage became fully accomplished by Gen 15[1438]; then according to the generation time interval of 34 years introduced earlier — *those with different surnames could not share a common ancestor with Mr. Stark in the past 15 generations.* [FTDNA defines distant genealogical time as generations 1 thru 15. This statement presumes all those compared had different surnames by Gen 15 and there were no non-paternal events within genealogical time.]
- 3) Conditional Statement 3: If those with different surnames cannot share a common ancestor in the past 15 generations with Mr. Stark — *then they cannot share a common ancestor WITHIN Generation 16[1404], but can share a common ancestor in Generation 16[1404].*

Appendix 1; Table 2: Stark/Taylor/Withers Surname Distribution 1841 English Census

This surname distribution focused on males with the surnames of interest reported to be 20 to 82 years of age. Numbers of males in the age ranges of 20-40, 41-61, and 62-82, were recorded for each English County; this approximately representing 2 to 3 generations. The 1841 census ask if the person enumerated was born in his County of residence. In each of our age ranges, we only counted those reporting they were born in their County of residence. See a Pictorial view of this distribution on the next page: "*Map 1: Historical Counties of England & Wales.*"

Counties	Stark			Taylor			Withers		
	20-40	41-61	62-82	20-40	41-61	62-82	20-40	41-61	62-82
Cornwall	0	3	0	64	40	8	2	0	0
Devon	16	12	2	284	134	54	1	0	0
Somerset	8	2	1	295	124	44	26	8	8
Dorset	0	1	0	63	24	13	1	0	0
Wiltshire	0	1	0	142	70	24	19	9	3
Hampshire	9	7	3	269	107	41	44	16	10
Surrey	4	0	1	272	93	25	1	1	0
Sussex	1	0	0	155	57	30	1	0	1
Kent	0	1	0	380	149	55	2	3	0
Essex	2	1	1	245	99	28	4	0	0
Middlesex	10	1	2	761	222	55	26	11	1
Berkshire	0	2	0	125	50	20	20	9	4
Gloucestershire	3	1	1	340	146	53	27	8	5
Oxfordshire	0	0	0	128	61	26	5	2	1
Buckinghamshire	0	0	0	57	24	16	2	1	0
Hertfordshire	0	0	0	105	49	17	0	0	0
Bedfordshire	0	0	0	82	28	11	0	0	0
Northamptonshire	0	0	0	107	54	23	0	0	0
Huntingdonshire	0	0	0	41	9	3	0	0	0
Cambridgeshire	0	0	0	118	50	21	0	0	0
Suffolk	0	0	0	268	110	40	0	0	0
Norfolk	5	3	0	238	96	57	18	11	4
Rutland	0	0	0	19	6	6	0	0	0
Leicestershire	2	1	0	196	70	28	6	3	3
Warwickshire	2	1	0	436	194	55	6	2	0
Worcestershir	0	0	0	260	96	38	6	7	0
Herefordshire	0	0	0	138	59	19	0	0	0
Shropshire	0	0	0	215	84	36	8	1	0
Staffordshire	0	0	0	490	187	48	16	6	0
Derbyshire	3	2	0	388	155	52	0	0	0
Nottinghamshire	0	0	0	285	114	56	12	5	2
Lincolnshire	16	5	1	484	166	73	4	1	0
Cheshire	0	0	0	364	127	30	0	0	0
Lancashire	5	0	0	3,229	1,134	273	11	7	1
Yorkshire	12	6	1	1,870	701	189	3	0	0
Durham	10	4	3	240	86	34	0	0	0
Westmorland	0	0	0	70	41	4	0	0	0
Cumberland	0	0	0	88	44	11	0	0	0
Northumberland	3	1	0	254	88	33	0	0	0

Historical Counties of England and Wales



Appendix 2: Map 1
1841 Census Stark Distribution in England
 Counties with male Starks ages 20-82. Numbers are #Stark / #Withers in each County ages 20-82. Areas in WHITE are Counties with no males with surname Stark. All Counties in England had males with surname Taylor, their #s reported Table 2.

Appendix 3

Table 3: Genealogical Lineages From the Descendants of Aaron Stark [1608-1685]

ID Codes beginning with Capital "A" are descendants of Aaron's son, William Stark I [1664-1730], presented in the Gen 9 column. ID Codes beginning with Capital "B" are descendants of another of Aaron's sons, Aaron Stark II [1654-1701], also presented in the Gen 9 column. The GD/AYG column reports the Genetic Distance relative to the 37 marker Modal Haplotype for Aaron's descendants and the calculated Average # Years of a Generation (Generation Time Interval..

ID	GD/AYG	Gen 0	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5	Gen 6	Gen 7	Gen 8	Gen 9	Gen 10
A1a	Zero 35	76234	Father Private	Samuel G 1888-1967	James M 1824-1905	Moses 1793-1860	Jonathan J. 1778-1850	James 1741-1821				
A1b	Zero 29.6	Grandfather 98044	George H 1882-1948	Robert S 1858-1911	Thompson 1829-1899							
A1c	One 30	78077	Father Private	William F 1848-1929	Carroll B 1821-1891	Enoch 1794-1864						
A1d	One 35.8	178528	Carroll Edd 1930-2011	Edward M 1900-1997	Esset A 1873-1968	Norborne P 1819-1880	Adin H 1795-1850					
A1e	One 33	Father 48711	William A. 1905-1959	Jonathan E 1882-1935	Simeon E 1858-1893	Elisha S 1811-1870						
A1f	One 32	Father 119763	Max W 1896-1971	William H 1855-1917	Simeon S 1820-1893	Jesse A 1802-1877	Abraham 1781-1857	Daniel 1746-1810	Jonathan I 1712-1764	William II 1690-1736		
A1g	Zero 29.2	Father 165568	James V 1871-1924	James A 1849-1933								
A1h	One 35.3	Father 176520	William H. [----]	Will Hugh [1890-1977]	Abraham H [1849-1938]	Stephen D [1808-1869]						
A1i	Zero 33.2	Father 80860	John Harold 1907-1956	Marion G 1868-1918	John Henry 1832-1915	Christopher 1802-1862	James V 1773-1853	Christopher 1747-1807				
A1j	Zero 35.8	74961	Father Private	Wesley 1894-1951	John W 1844-1894	John A 1811-1874	Benjamin 1783-1831	John 1756-1841				
A1k	One 38.7	Son 115456	115456	Father Private	Harry L 1879-1968	Bethuel G 1840-1908	Caleb 1793-1876	Joseph 1746-1807				
A1l	Zero 34.5	202299	Father Private	Larkin M 1884-1923	Larkin 1838-1896	James 1804-1873	Joseph 1776-1814	Jonathan II 1740-1802				
A1m	One 35.5	Son 63737	63737 1928-2011	Leslie O 1893-1971	Samuel A 1859-1939	Franklin S 1831-1899	Prince L. 1795-1862	John 1754-1825	Moses 1716-1797			
A1n	Three 36.3	75156	Father Private	William L 1898-1956	Nathan T 1863-1917	Isaac A 1822-1867	Daniel 1793-????	Daniel A 1761-????	William III 1723-1795			
A2a	Zero 32.6	78078	Father Private	William O 1869-1951	John L. 1848-1926	Asahel L 1817-1881	Daniel R. 1788-1820	Asahel 1755-1821				
A2b	One 38.9	Father 203166	Earle H 1922-1988	Jay W 1897-1960	Jared H 1858-1911	Milo 1829-1918	Isaac 1805-1874	Nathan 1762-1812	Christ' II 1728-1785	Christ' I 1698-1777		
A2c	Two 32.9	Father N56748	Harold V 1904-1984	John Kneff 1877-1950	William 1844-1920	John K 1812-1881	Daniel 1793-1825	John 1763-1841				
A2d	Two 39.6	154414	Father Private	Virgil E 1925-2000	William E 1871-1944	William P 1830-1908	Henry 1804-1882					
A2e	Zero 38.3	Son 247428	247428	Father Private	Bert Harold 1876-1942	Josiah 1834-1885	Egbert 1813-1882	Aaron Jr 1755-1835	Aaron 1734-1778			
A3a	One 35.4	N17289	Father Private	Lewis C. 1891-1977	Leroy H 1865-1896	Henry H 1840-1900	Jeremiah 1798-1870	Abijah 1768-1842	Nathan 1743-1830	Daniel 1702-1758		
B1a	Zero 37.6	98140	Father Private	Horace J. 1909-1995	William H. 1873-1937	John G. 1836-1912	Abiel 1806-1869	Nathan II 1763-1837	Nathan I 1725-1780	Abiel (1st) 1689-1755		
B2a	One 34.8	87105	Father Private	Osmer E. 1886-1964	Edward 1855-1908	Andrew 1821-1876	Reuben 1797-1877	Ebenezer 1768-1860	Stephen II 1717-1777	Stephen I 1686-1755		
B2b	Two 33.2	Father 172378	Gould P. 1907-1980	Bernard J. 1879-????	Byron C. 1852-1928	James A. 1815-1886	Roderick 1787-1858	Stephen III 1766-1820				
B2c	Zero 35.6	Son 206763	206763	Father Private	John Joseph 1857-1920	Stephen 1823-1885	William 1790-1839	Samuel, Jr. 1759-1834	Samuel 1722-1758			
B3a	Two 31.4	Father 102286	Raymond 1891-1943	Samuel A. 1864-1939	Aaron 1830-1899	John Reid 1798-1880	John II 1771-1844	John 1733-1822	Aaron IV 1708-1772	Aaron III 1678-1744		
B3b	Zero 37.3	233230	Father Private	Elmer M. 1906-1996	Homer 1883-????	James W. 1844-1912	Aaron 1804-1864	Isaac 1758-1824	Amos 1717-1767			