

Aaron Stark's (1608-1685) Ancestral Roots; A Theory

By Clovis LaFleur, February 2013

Introduction

There has been much speculation about the ancestral roots of Aaron Stark which have not been satisfactorily answered. Part of the problem has been the belief of earlier researchers that Aaron Stark was a descendant of John Muirhead (alias John Stark). The account of John Muirhead saving King James IV from the charge of a bull and given the name Stark as a result of his bravery, was first presented in the 1903 Stark Family Association Yearbook. On page 15 of the Yearbook, there is a poem entitled, "Story of the Origin of The Stark Name." The events depicted in this poem came from an account by Sir George Mackenzie [1636-1691]; which tells the story of how John Muirhead was given the name John Stark by a grateful King James IV of Scotland. On Page 21 of the 1903 Yearbook, there can be no doubt the membership believed they were all descendants of John Muirhead. In the preamble to the Association's Constitution, they stated: "*In order to form a more perfect union and to become more closely identified with each other, We, the descendants of one Muirhead, a Scotchman, to whom King James the Fourth gave the name of Stark (meaning strong) for his great bravery, do hereby adopt the following as the constitution of the Stark Family.*"

The Stark Family Y-DNA Project has found genetic evidence the descendants of Aaron and those most likely to be descendants of John Muirhead, could not have shared a common ancestor within 3,100 to 3,900 years. Because Aaron Stark clearly was not a descendant of John Muirhead (alias John Stark), then, perhaps, after 100 years of looking in Scotland, the time has come to look elsewhere for Aaron's ancestral roots — *the beginnings of this search based on the following evidence to be presented.*

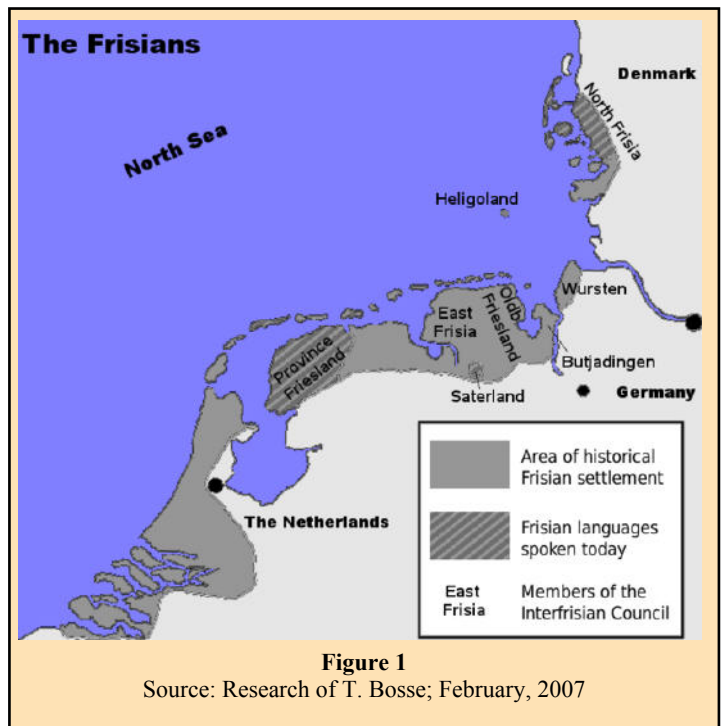
The Old Germanic Tribes

Sometime between the calendar years 1900 BC to 1100 BC, a son was born to a couple, the father transmitting his Y Chromosome to his son. Normally, the Y-Chromosome would be passed without change, the son's Y Chromosome being identical to that of his father; but when this transmission was complete, a rare mutation occurred, which would be passed from father to son for a 100 generations to the present. The Single Nucleotide Polymorphism (SNP) mutation would become known as the U106 mutation defining the Haplogroup R1b1a2a1a1a (shorthand notation is R-U106).[1][2] This progenitor of R-U106 could have lived among the early Germanic tribes of 1750 BC, one of which was the Frisian Tribe. From his sons, many independent direct male branches evolved, descendants of these branches living today with many different surnames and having the U106 mutation.

By 1400 BC, these early Germanic tribes expanded their territory into southern Europe and by 800 BC, the original Germanic groups that expanded into southern Europe had split into Western, Eastern, and Northern Germanic groups. By about 700 BC, the expansion of the Western Germanics had reached the coastal areas of northwest Germany. (See Figure 1)

The Western Germanic tribes had divided along religious lines into three tribal groups known as the Inguaeones, Istuaeones and Irminones — *the Frisians best religiously identified with the Inguaeones tribal group.* Between 700 BC and 600 BC the forefathers of the Frisians colonized the coastal clay-districts of the current Dutch provinces of Friesland and Groningen.

Between 400 BC and 200 BC, significant cultural and climate changes took place after the colonization of the clay-district. As Sea levels began to rise causing periodic flooding of their homesteads, the Frisians built earth-mounds known as terps to counter these periods of flooding. The terp mounts first appeared about 500 BC; and reappeared again during a second period of flooding that occurred from 200 BC to 50 BC.



1) Geneticists seem to be in agreement the U106 mutation first appeared 3,100 to 3,900 years ago. Subtracting these years from the calendar Year 2000 results in the Calendar Years presented.

2) Haplogroups are major branches on the Y chromosome tree. ["Haplo" comes from the Greek word for "single".] All Haplogroups ultimately descend from a single Y chromosome that was carried by a male that lived in the distant past. As this Y chromosome was passed from father to son, mutations accumulated along different lineages giving rise to a tree-like branching pattern. Geneticists can reconstruct this Y chromosome tree by discovering and typing mutations in different male human populations.

In 200 BC, a distinctly Frisian culture can be found between the River Ems (Germany) and Wijk-bij-Duurstede (Netherlands). Julius Caesar conquered Celtic Galicia about 54 BC (these are the current countries of France and Belgium), moving the Roman border to the Rhine River. The Frisians were located north of the river. In 12 BC, the Frisians negotiated a truce by which the Frisians had to regularly pay taxes in the form of cowhides. After additional periods of turmoil and boundary disputes from 28 AD to 47 AD, an agreement was made stipulating a mutual understanding that the Rhine was to be the border that both parties had to respect. As part of the agreement, Friesland would fall within the Roman sphere of influence; but it would no longer be occupied by Roman soldiers.

In 250 AD, the sea levels again rose accompanied by severe storms, causing widespread flooding so dramatic that almost all of the Frisians abandoned the coastal Clay Districts for the next 150 years. By 300 AD, other smaller West Germanics had formed larger tribal groups known as: Allemandes, Saxons, Thuringers, and Bayerns. A Chaukian tribe disappeared altogether; having been assimilated into the Frisian and Saxon tribes. With the collapse of the Roman Empire about 350 AD, the Germanic migration period began all over Western Europe, new tribes being formed as the newly regions were conquered.

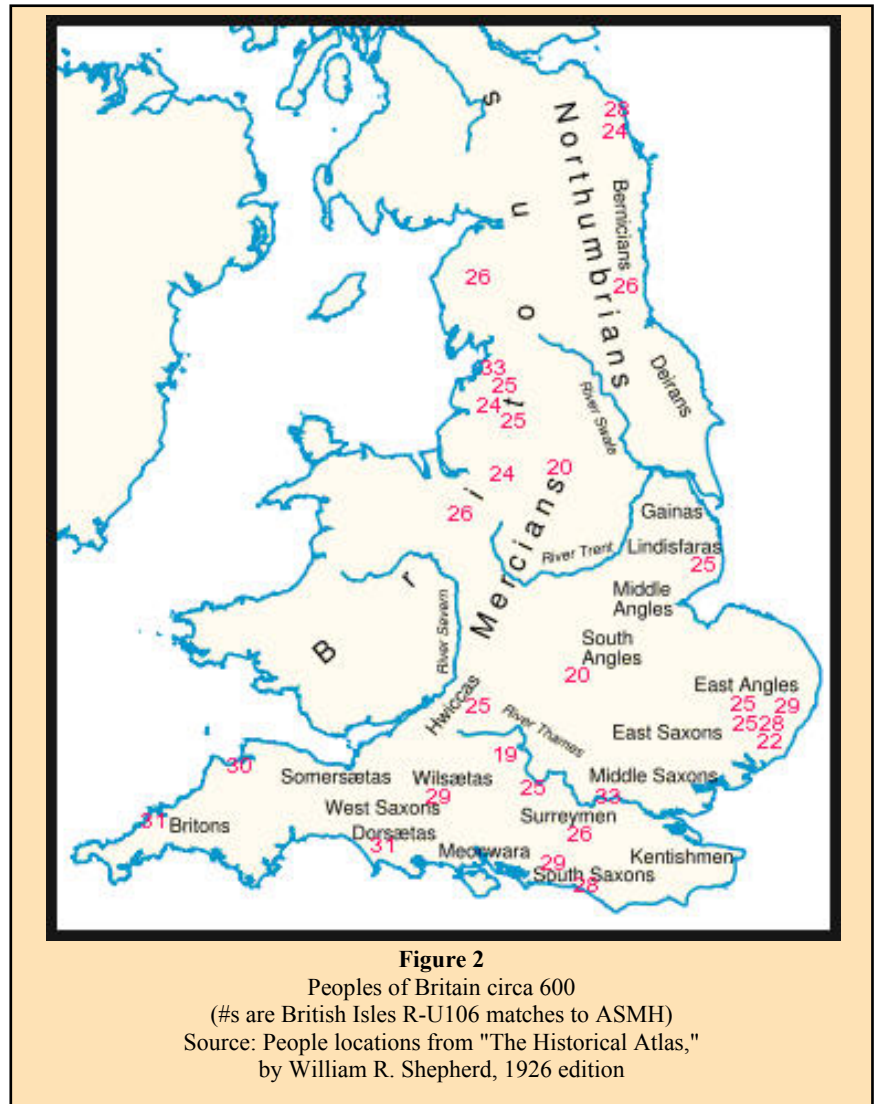
Around 450 AD, the Angles, Saxons, Jutes and a Frisian fraction crossed the North Sea and established what became the Anglo-Saxon empire in present day England. Migration to Britain from what is now northern Germany, the northern part of the Netherlands and southern Scandinavia was well underway by 400 AD and continued into 600 AD. While the intruding population had traditionally been divided into Angles, Saxons, and Jutes — *many historians believe their composition may have also included Frisians and Franks*. The Anglo-Saxon Chronicle contains text that may be the first recorded indications of the movement of these Germanic tribes to Britain. Their tribal distributions in England by 600 AD are illustrated in Figure 2. Considering the tribes were Saxon and Frisian, this was most likely when males with the U106 mutation arrived in England.

Various Saxon Kingdoms were created from 800 AD to 900 AD, the most important being the Kingdom of Wessex; from which emerged the first King to achieve direct rule over what was to become "*England*." These old Saxon Kingdoms were located south and east of present day London. For a time, there was considerable turmoil as a result of each Kingdom attempting to gain control. This all came to a halt in 1066 when the Norman Conquest established Anglo-Norman Rule over England.

English Kingdoms and Scottish Kingdoms ruled their respective regions separately; the Germanic Tribes continuing to live in the southern regions of England they had originally conquered.

Rannulf Stark is considered the first recorded of the Stark surname; entered in the Pipe Rolls of Suffolk, in 1222 during the reign of King Henry III. In 1314, William Stark appeared in the Fine Court Rolls of Essex as a witness. These were early surnames records of the nobility that began in about 1200. In England, commoners were required to have surnames throughout England soon after the 1377 Poll Tax was introduced and were most likely fully established by 1400. Because Aaron Stark was not of the nobility, Aaron's male ancestor most likely took the surname "Stark" during this transition period.

Two present day descendants of Aaron Stark have been confirmed to be members of Haplogroup R-U106 — *this result predicting all of the descendants of Aaron genetically tested will be members of the same Haplogroup*. Aaron would have also been positive for the U106 mutation, as is our descendant of Asa Lafitte Stark genetically proven to be a descendant of Aaron. In the next section, a combination of geographical information and genetic comparisons to others with the U106 mutation will be analyzed in an attempt to determine Aaron's ancestral roots.



Historical Background Suggesting Aaron's Old World Home

From their first arrival aboard the Mayflower in 1620, until 1629, only about 300 Puritans had survived in New England, scattered in small and isolated settlements. In 1630, their population was significantly increased when the ship Mary and John arrived in New England carrying 140 passengers from the English West Country counties of Dorset, Somerset, Devon and Cornwall. It was the first of the ships later called the Winthrop Fleet to land in Massachusetts. From 1630 through 1640 approximately 20,000 colonists came to New England during the Great Migration period. The immigrants to New England came from every English county except Westmoreland, nearly half from Norfolk, Suffolk and Essex.

While the Mary and John passenger list is not well documented, we know the immigrants founded the First Parish Church of Dorchester in 1631, the place name of their new community taken from Dorchester, Devon County, England. In the 17th century this English town was at the center of the Puritan emigration to America, and the local rector, Rev. John White, was instrumental in organizing the voyage and supported the settlement of Dorchester, Massachusetts. For his efforts on behalf of Puritan dissenters, White has been called one of the unheralded founders of the Massachusetts Bay Colony.

In 1633, the Plymouth Trading Company established the first Connecticut settlement, a trading post at what would later become Dorchester, Connecticut in territory the Dutch claimed and in which they maintained a fort and trading post about seven miles downriver from present day Hartford, Connecticut. In 1635, Puritan and Congregationalist members of Reverend Warham's and Reverend Maverick's congregation, including, John Mason, Roger Ludlow, Henry Wolcott, and others, all prominent settlers in the new community, became dissatisfied with the rate of Anglican reforms. They sought permission from the Massachusetts General Court to establish a new ecclesiastical society subject to their own rules and regulations. About 60 individuals, totaling 23 heads of households, undertook a two-week's journey about 100 miles to the west. They founded a new town they initially also named Dorchester. Later, on February 21, 1636, the Connecticut General Court changed the name of the settlement from Dorchester to Windsor, believed to be named after the city of Windsor, England located on the River Thames. The new town was the first English settlement in the now state of Connecticut.

All of the above suggests Aaron could have been one of these immigrants arriving in New England during this early historical period. Therefore, it would seem reasonable to begin a search for Aaron's old world home in the southern part of England between 1608 to 1637 and his parents in the region before 1608. The above, therefore, suggests the following:

Hypothesis 1: Aaron Stark came to New England from the region in or around Devon County, England either with members of Rev. John Warham's Congregational Church newly formed in Exeter, Devon, England; or, more likely, as part of the Great Migration to New England that came after the voyage of the Mary and John.

Origins of the Stark Surname

One source describes the surname as follows: [1]

"This name derives from the Medieval English "Stark" itself coming from the Olde English pre 7th Century "stearc" meaning "firm and unyielding". The name was originally given as a nickname to a strong determined person and is first recorded in the early half of the 13th Century, (see below). One, William Stark appears in the 1314, Fine Court Rolls of Essex as a witness. The surname is well recorded in Scotland from the late 14th Century onwards. In "Ancient Charters of the earldom of Morten" the leasing of Estirbalbretane lands to Richard Starke is recorded (1376). William Stark, tenant in Castalstaris, appears in the "Rental Book of Glasgow diocese" (1540). The name, with its variant forms Starkie and Starkey, is in Ireland since the 14th Century. The first recorded spelling of the family name is shown to be that of Rannulf Stark, which was dated 1222, in the Pipe Rolls of Suffolk, during the reign of King Henry III, known as the Frenchman (1216 - 1272)."

Another author's definition and origin of the German/English word "stark" states: "stark adj.; related to stark "strong": stiff, rigid, standing out, bleak, desolate, barren, sheer, utter, downright, hard, harsh, severe, strong, powerful [Middle English starc < Anglo-Saxon stearc]. Stark doesn't come from Modern German but rather from Middle English and Anglo-Saxon and therefore has common roots with Modern German." [2]

Hypothesis 2: If Hypothesis 1 is true, could Aaron Stark's ancestral roots be that of one of the early Western Germanic Tribes that began migrating about 400 AD into the southern regions of England from what is now northern Germany, the northern part of the Netherlands and southern Scandinavia? The intruding population has traditionally been divided by historians into the Angles, Saxons, and Jutes, but their composition may also have included Frisians and Franks.

1) [The Internet Surname Database](#)

2) [German English Words](#)

The Aaron Stark Modal Haplotype

A number of descendants of Aaron Stark were perfect genetic matches to each other over the 37 DYS Markers tested on the Y chromosome, which includes the descendant of Asa Lafitte Stark.[1] These marker matches define a Modal Haplotype composed of the most common Allele values observed at each marker over a specific Haplotype. [See Notes 2 thru 5]

Suppose Aaron was a descendant of one of the Frisian tribes that migrated from the European Continent to southern England. Because Aaron's descendants belong to Haplogroup R-U106 — *it is a given Aaron also had the U106 mutation*. The progenitor of the U106 mutation could have been born between the calendar years 1900BC and 1100BC. Assuming the time span of Aaron's ancestral generations consistently averaged 34 years, it is also a given that there were approximately 81 to 104 direct male ancestors from Aaron back to the U106 progenitor; all of whom would have tested positive for the mutation.[6]

An Infinite Alleles statistical probability model for estimating Time to the Most Recent Common Ancestor (TMRCA) was introduced in a publication by Bruce Walsh in 2001.[7] On page 898 of this article, equation 3 introduced the "likelihood for the time (t) back to the MRCA given that we observe (k) out of (n) matches." [(n) equals total # DYS Markers compared; (k) equals total number of allele matches over the DYS markers compared; and (t) equals number of generations to TMRCA.]

For example, when compared over 37 DYS markers, if there is a match at 19 markers and a mismatch at 18 markers, the match ratio would be 19/37. The amount of difference in alleles values is not considered; only a mismatch in value at a specific marker is considered. For the genetic DYS Marker comparison's, an online calculator using the infinite alleles model was used to determine: *"the two individuals genetically compared most likely shared a common paternal ancestor x number of generations ago."*[8] (x) in generations from this calculator will correspond to the peak posterior distribution (Likelihood in %) that occurs given the total number of Markers (n), the total number of marker matches (k), and the mutation rate (the value .003). From the peak likelihood values calculated, those likelihood values that are $\pm .95$ the peak likelihood value — *provide a range of likely generations within which a Most Recent Common Ancestor may have lived given the number of Marker Matches (k)*.

Aaron's 37 DYS Marker Modal Haplotype (shortened to ASMH for the remainder of this discussion) will now be compared to others with the U106 mutation tested over the same DYS markers. Those chosen to be compared to the ASMH have genealogical research suggesting where in England or Western Europe their earliest ancestor lived.

Discussion: R-U106 Genetic Comparisons to ASMH

Figure 2 illustrates the approximate locations in England of the various Germanic Tribe populations that had migrated from Western Europe by 600 AD. The RED numbers on this map are the number of matches (k) in a 37 marker comparison. For example, the value 25 corresponds to a 25/37 match ratio. Its location on the map corresponds to the resident location of the earliest known ancestor of a selected person compared to the ASMH.

There are three clusters in this illustration. One is somewhat scattered south of the River Thames; another is in present day Suffolk County (beneath East Angles on the map); and a third centers in present day Lancashire County (Northeastern England). The comparisons to ASMH south of the Thames River ranged from a low of 19/37 to a high of 33/37; in Suffolk County, the range was from a low of 22/37 to a high of 29/37; and in Lancashire, the range was 24/37 to 33/37.

1) Direct Line Lineage to Asa L. Stark {W.⁵ T. Stark, Father⁴-Private, William³ Oscar Stark, John² Lawhorn Stark, Asa¹ Lafitte Stark}

2) **Allele Value:** A DNA sequence that repeats at a certain locus or place. The allele value is the number of times the sequence repeats. (Pronounced uh-LEEL)

3) **DYS Marker :** The "name" of a marker on the Y chromosome. It is assigned based on a nomenclature system controlled by the HUGO Gene Nomenclature Committee, which assigns DYS numbers to newly discovered markers. DYS markers have "allele values" which are observed from DNA samples supplied to a laboratory by the Program Members.

4) **Haplotype:** Collection of two or more DYS markers. Presentation of DYS Markers 1-12 will be Panel 1 (P1); DYS Markers 13-25 will be Panel 2 (P2); and DYS Markers 26-37 will be Panel 3 (P3). Each of these Panels represents a Haplotype. All three panels have been combined to create the 37 DYS marker Haplotype being discussed.

5) **Modal Haplotype:** Haplotype defined as the most common allele value at each DYS marker for a Group of Individuals; in this case descendants of Aaron Stark tested over the same 37 DYS markers.

6) Observations of all of Aaron Stark descendants Genealogical Lineage suggests on average the time interval of a generation from the birth of a father to the birth of son is 34 years. Aaron was born in 1608; on ten generations earlier than those his descendants genetically tested. For example, we know Aaron was born in 1608; then the average calendar year of birth of his 10th generation descendants would be: the calendar year 1608 + (34 Years X 10 generations) = the calendar year 1948. Therefore, on average, members of the 10th generation were more likely to have been born in 1948 \pm 17 years; or within the 1931 to 1965 time span. While not a precise measurement, for the discussion that follows — as a result of this genealogical observation of Aaron's descendants — the time span of a generation will be 34 years \pm 17 years.

7) Walsh, Bruce, 2001. "Estimating the Time to the Most Recent Common Ancestor for the Y chromosome or Mitochondrial DNA for a Pair of Individuals," Genetics, 158(2):897-912). Article available online as a PDF file at URL: <http://www.genetics.org/cgi/reprint/158/2/897.pdf>

8) Online Infinite Alleles Model Calculator available at URL: <http://www.dnacalculator.org/tmrcaCalculator.php>.

South of the Thames River, there were four comparisons with matches ranging in value from 30/37 to 33/37. The comparison resulting in 33/37 would most likely share a common ancestor with Aaron's descendants born between 1166 AD and 1404 AD. The peak likelihood year of birth within this time interval would be the year 1302 AD.[10]

Thomas Land, born in 1618, was the earliest ancestor of the person compared, reported by his descendant to have been a resident of Westminster, London County, England. The common ancestor of Aaron and Thomas Land could have been anyone of Aaron's 7 direct male ancestors born within this time interval. However, Aaron and Thomas have different surnames in the years 1608 and 1618 — *suggesting their common ancestor most likely was born in a year nearer to 1166 AD than 1404 AD; this allowing time for surnames to become established and these separate surname descendant lines to evolve.*

It would seem reasonable to suggest these theoretical ancestors of Aaron's descendants — *genetically shared with those persons compared to ASMH* — represent the beginnings of many separate surname descendant lines, one of which was Aaron's first ancestor with the surname Stark. It's not inconceivable Aaron changed his surname when he arrived in New England, for his 1639 appearance before the Particular Court of Connecticut is the first record we have of the surname Stark. Although our knowledge of Aaron's early years is limited, it is obvious he was a commoner and most likely his ancestors were Commoners (perhaps even Serfs for example). Therefore, it would seem unlikely Aaron could have inherited his surname from Rannulf or William Stark, suggesting they were not Aaron's ancestors. He may have inherited his surname from an ancestor living on the land of Nobility with the surname Stark; or Aaron's ancestor came by the name due to some physical or behavioral trait.

Persons selected for comparisons reporting their earliest known ancestor was a resident of Suffolk County and having 28/37 and 29/37 match ratios, most likely share a common ancestor with Aaron born between 180 AD and 724 AD, possibly born during and after the Germanic migration period to England. Persons reporting their earliest known ancestor was a resident of Suffolk County and having 22/37 and 25/37 match ratios would share a common ancestor born between 1248 BC and 466 BC; born well before the migration to England. These common ancestors most likely lived in one of the Figure 1 Frisian Settlements, many of their descendants joining the later migration to England. However, It is certain none of these persons compared to ASMH could share a common ancestor with Aaron born in England.

The cluster centering in and around Lancashire County most likely share common ancestors with Aaron's 10th generation descendants who lived in Northwestern Europe before the migration to England. The 24/37 and 25/37 match ratios suggests the common ancestors were born between 738 BC and 58 BC, the later date approximately 400 years before the Germanic migration to England. Aaron's descendants and the descendants of these persons most likely do not share a common ancestor born in England. The earliest known ancestor of the 33/37 match ratio in Lancashire could have migrated from southern England.

The other comparisons south of the Thames River suggests common ancestors that could have been born as early as 466 BC and as late as 1098 AD. Common ancestors of the 29/37, 30/37 and 31/37 match ratios could have been born as early as 384 AD and as late as 1098 AD. Between 800 AD and 900 AD, the Kingdom of Wessex produced the first King to achieve direct rule over what is considered "England." This Kingdom was located south of the Thames River. It would not seem unreasonable to suggest some movement of the Suffolk families towards places of power could have occurred and the earliest known ancestor of those compared to ASMH were their descendants.

Comparisons to those reporting their earliest known ancestor lived in Western Europe had match ratios ranging from a minimum of 19/37 to a maximum of 28/37. It would seem reasonable the ancestors of those selected for comparison were descendants of members of the Germanic Tribes that did not migrate to England. The common ancestor of those compared lived between 180 AD and 554 AD. The historical comments for this time span are:

"The Germanic migration period lasted from 350 AD to 500 AD. Germanic tribes migrated all over Western Europe after the collapse of the Roman Empire, forming new tribes in the newly conquered areas. Around 450 AD, the Angles, Saxons, Jutes and a Frisian fraction crossed the North Sea and establish the Anglo-Saxon empire (currently known as England). The Frisians colonized the county of Kent in southeast England. Around 480 AD, KING Clovis established the Frankish Empire (currently known as France), originating from the Chaukian and Frisian Germanic Tribes."

Therefore, it is reasonable to expect most match ratios will be 19/37 to 29/37 in the Western European genetic comparisons to ASMH.

Conclusions

Observations presented in the above discussion certainly would appear to provide credible evidence Aaron Stark could have been born south of the Thames River in England. Based on the above, we (the authors) would suggest the genealogical research for Aaron's ancestral home be directed into these regions, attempting to find links to others living in the region with the surname Stark at the time of Aaron's birth. Other derivations (Starks, Starke) of the surname should also be pursued. Aaron's deep ancestral roots are certainly connected to the Germanic Tribes discussed because he was positive for the U106 mutation. It now remains to search for his English Ancestors.

1) The peak likelihood in this comparison was 19 generations; 95% of the peak to a lesser generation value resulted in 16 generations; 95% of the peak to a greater generation resulted in 23 generations. Aaron's descendants tested were born on average in 1948. For the peak likelihood, 19 generations was multiplied by 34 years resulting in 646 years. This value was then subtracted from the calendar year 1948 resulting in the calendar year 1302 ± 17 years as the peak likelihood year of birth time span. For 19 generations, the calendar year calculated was 1404 ± 17 years; for 23 generations the calendar year 1166 ± 17 years. This suggests a genetic comparison resulting in a 33/37 match ratio will share a common ancestor born between the calendar years 1166 (±17) to 1404 (±17) with the most likely birth year being the calendar year 1302 ± 17 years.

England & Wales 1891 Census

The England and Wales 1891 census reported 1,982 Stark families distributed over the Counties presented in the map in Figure 3. The largest concentration of families in the northern Counties were: Northumberland (87); Durham (181); North, East, West, & South Yorkshire (204); Lancashire (152); and Lincolnshire (87). Concentrations in the southern Counties were: Hampshire (262); London (320); Cornwall (24); Devon (112); Somerset (106); Dorset (21); Wiltshire (7); West & East Sussex (17); Surrey (25); Kent (25); Berkshire (17); and Essex (54). While there could have been considerable migration of descendants of Stark families by 1891; this distribution of the Stark surname may not be an accurate guide to where Aaron's family originated. However, this distribution is very similar to the Match Ratio comparisons presented in Figure 2 and cannot be overlooked as having relevance to Aaron's ancestry.

Let us now turn to the Life & Times of our Connecticut ancestors in New England.

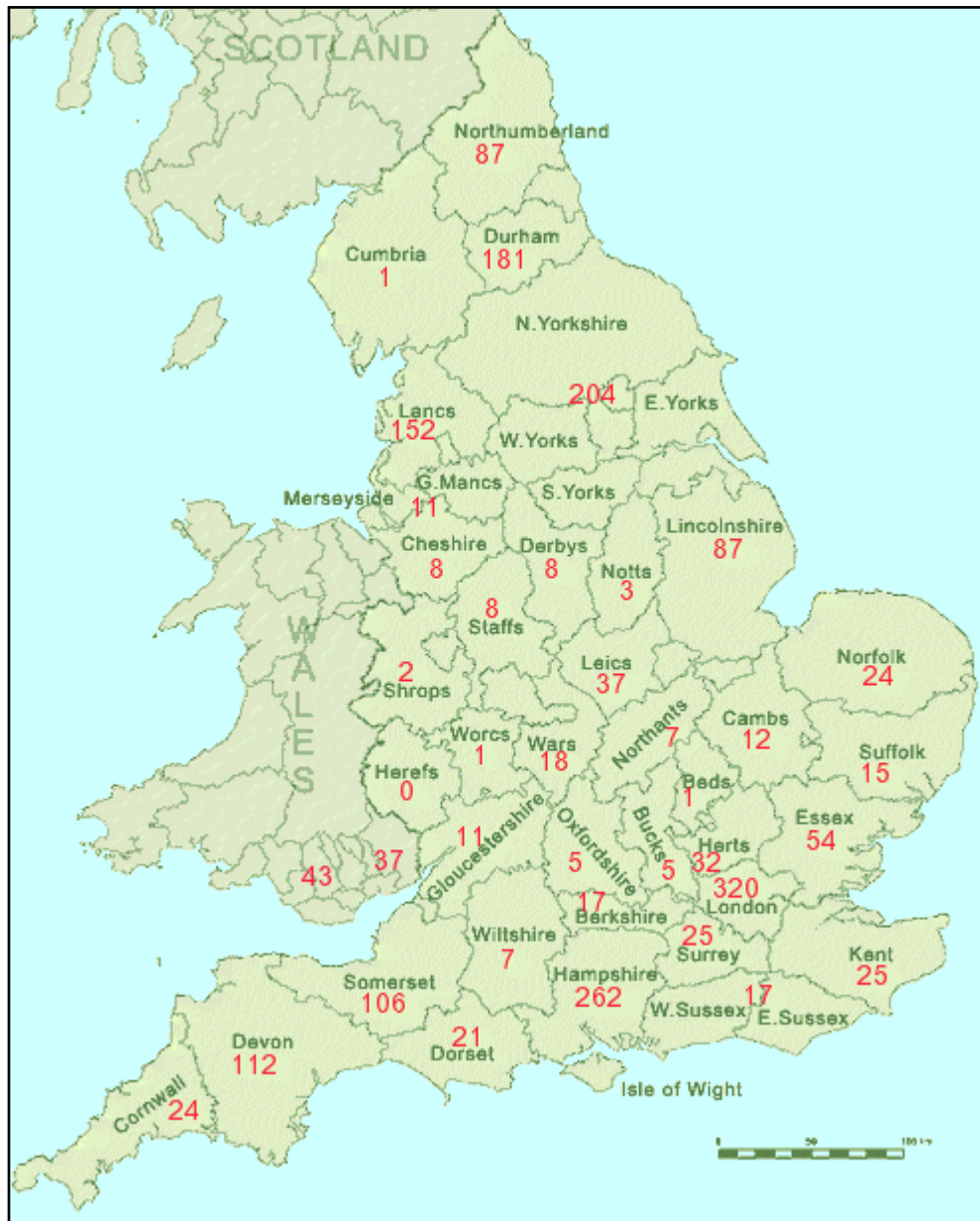


Figure 3: Present Day England
 (# Stark Families based on 1891 County Boundaries)

County Abbreviation Keys

Beds = Bedfordshire | Bucks = Buckinghamshire | Cambs = Cambridgeshire | Derbys = Derbyshire | Herefs = Herefordshire
 Herts = Hertfordshire | Lancs = Lancashire | Leics = Leicestershire | Mancs = Manchester
 Northants = Northamptonshire | Notts = Nottinghamshire | Shrops = Shropshire | Staffs = Staffordshire
 Wars = Warwickshire | Wores = Worcestershire | Yorks = Yorkshire