

Samuel¹ Walker, Kinsman of Captain Richard¹ Walker



Eugene Allen Walker is a ninth-generation descendant of Samuel Walker. He wishes to express his gratitude to the descendants of Samuel and Capt. Richard Walker and his "Walker DNA cousins" in England, Australia, and New Zealand who contributed their DNA for the Big Y-700 testing that made this study possible.

Captain Richard Walker and Samuel Walker were among the earliest settlers of Reading, Massachusetts, established from Lynn Village on May 29, 1644.

Richard Walker had immigrated by 1633 and settled in Lynn.¹ He became a member of the Ancient and Honorable Artillery Company of Massachusetts as an ensign in 1638,² and removed to Reading from Lynn in 1644.³ He became a captain of the Reading Company in 1651, and was Deputy Governor of Nova Scotia in 1670. He died in 1687.⁴

Samuel Walker was best known as the maltster and tavern keeper of Woburn, Massachusetts,⁵ where he resided from 1655 until his death in 1684. Previously he lived in Reading, where he was allotted three acres of land in Parley Meadow on 6 January 1644/5.⁶ His whereabouts prior to that date are unknown, although he may have been the Samuel Walker of Exeter, New Hampshire, who arrived in 1638.⁷

Capt. Richard and Samuel both received general divisions of common land from the town of Reading in 1647 and 1652⁸ and also held adjacent parcels in the swamp.⁹ Clearly the two Walkers knew each other, but were they related?

In 1829, Alonzo Lewis wrote in his *History of Lynn* that Samuel Walker of Reading was the son of Capt. Richard Walker of Lynn.¹⁰ For the next eighty years this assertion that Samuel Walker, born about 1615,¹¹ was the son of Capt. Richard Walker was widely accepted,¹² although Walker genealogists Arthur G. Loring and William R. Cutter had "no opinion to express" on the matter in 1903.¹³

In 1908 and 1909, Charles E. Mann, president of the Malden Historical Society and a descendant of Samuel Walker, extensively researched the life of Capt. Richard Walker. Mann found overwhelming evidence that Capt. Richard Walker was born in 1611 or 1612, not 1592 as previously thought.¹⁴ This new information proved that Samuel Walker could not have been the son of Capt. Richard Walker. However, researchers continued to believe they were related, and Mann in his own words stated, "I like to believe that Samuel was a brother, now that the belief of a hundred years that he was a son has been found untenable."¹⁵

Research into the origins of the two Walker immigrants might be facilitated if kinship could be proved. The question of a possible relationship will be explored by using genetic genealogy.¹⁶

The Walker Surname DNA Project

The use of Y chromosome DNA testing is a valuable tool for determining whether documented genetic male lines share a common ancestor. Two types of Y chromosome mutations are useful, single nucleotide polymorphism (SNP) and short tandem repeat (STR).¹⁷ SNP mutations are stable and rarely, if ever, revert to the previous state (back mutate) in succeeding generations. Passed from generation to generation, SNPs form the basis for identifying genetically related groups known as haplogroups. STR mutations occur more frequently, may back mutate over time, and can be useful in refining haplogroups into smaller groups of closely related individuals.

Table 1. Walker 12-Marker Haplotypes

| FTDNA Kit# | Walker | Walker Surname DNA Project Groups | STR DYS#s | | | | | | | | | | |
|------------|---|-----------------------------------|-----------|-----|----|-----|-------|-----|-----|-----|------|-----|-------|
| | | | 393 | 390 | 19 | 391 | 385 | 426 | 388 | 439 | 389i | 392 | 389ii |
| 22951 | Samuel ¹ , Joseph ² , ... | GP-12 | 15 | 22 | 15 | 10 | 15-16 | 11 | 13 | 11 | 13 | 12 | 32 |
| 24077 | Samuel ¹ , John ² , ... | GP-12 | 15 | 22 | 15 | 10 | 15-16 | 11 | 13 | 11 | 13 | 12 | 32 |
| 710733 | Samuel ¹ , Joseph ² , ... | GP-12 | 15 | 22 | 15 | 10 | 15-16 | 11 | 13 | 11 | 13 | 12 | 32 |
| 931769 | Richard ¹ , ... David ⁴ , ... | GP-12 | 15 | 23 | 15 | 10 | 15-16 | 11 | 13 | 11 | 13 | 12 | 32 |
| 934338 | Richard ¹ , ... Obadiah ⁴ , ... | GP-12 | 15 | 23 | 15 | 10 | 15-17 | 11 | 13 | 11 | 13 | 12 | 32 |
| IN87344 | (Australia) | GP-12 | 15 | 23 | 15 | 10 | 15-15 | 11 | 13 | 11 | 14 | 12 | 33 |
| B326911 | (New Zealand) | GP-12 | 15 | 23 | 15 | 10 | 15-15 | 11 | 13 | 11 | 14 | 12 | 32 |
| B283810 | (England) | HAP-I | 15 | 23 | 16 | 10 | 15-15 | 11 | 13 | 11 | 14 | 12 | 32 |

Family Tree DNA (FTDNA) offers Y-DNA tests that examine up to 111 STRs on the Y chromosome, and a Big Y-700 test that examines approximately 700 STRs and over 200,000 SNPs.¹⁸ The Walker Surname DNA Project compiles haplotypes of Walkers who test their Y-DNA and join the project.¹⁹ The project's Group "GP-12" includes two descendants of Capt. Richard Walker, several descendants of Samuel Walker, and descendants of other Walkers who exhibit a similar STR haplotype. The DNA samples from Capt. Richard descendants are through Capt. Richard's grandson Nathaniel, son of Shubal.²⁰ All other known male lines of descent from Capt. Richard became extinct by 1725, in the second through fourth generations.²¹

Scandinavian heritage and the Walker surname

The FTDNA kits shown in Table 1 were upgraded to Big Y-700 tests to determine their SNP haplogroup and allow a detailed genetic analysis of the GP-12 Walker ancestry. The test results show that kit #B283810, a Walker from England, is in haplogroup I-FT374890, whereas the other Walker kits are in haplogroup I-FT374569, a subbranch of I-FT374890.²² Surnames started to become hereditary in England after the Norman Conquest in 1066 and continued to develop over the next three centuries.²³ Because the Walker surname first occurred in Haplogroup I-FT374890, the parent haplogroup of I-FT374569, it is likely that haplogroup I-FT374569 formed after the Walker surname became hereditary for this clan, probably no earlier than the beginning of the twelfth century.

These two Walker haplogroups, I-FT374569 and I-FT374890, are subbranches from haplogroup I-Y13037, which formed in Scandinavia about 1400 BCE and has a date of about 50 CE for its most recent variant.²⁴ Haplogroups I-Y51011 and I-Y34559 are parallel branches to I-FT374890 and descendants are found in Denmark, Norway, and Sweden, as shown in Figure 1.²⁵ As many as

20,000 to 35,000 Danish Vikings migrated to England in the late ninth and early tenth centuries,²⁶ settling in Northumbria and the Danelaw regions of northern and eastern England. Haplogroup I-FT374890 and its subbranch I-FT374569 probably formed in England through a descendant of one of those Viking settlers.

Surnames were often derived from either occupational or place names. A commonly accepted origin for the Walker surname is the Anglo-Saxon word "wealcere," meaning a fuller, one who walked on cloth to soften it. But given this clan's Scandinavian heritage, it is worth noting that Walker is also a place name near Newcastle upon Tyne in England. The village of Walker was first recorded as "Waucre" in 1242 and "Walkyr" in 1268, meaning "wall-kerr" or the marsh by the Roman wall (i.e., Hadrian's Wall).²⁷ A variation of the word "kerr" is the ancient Scandinavian word "kiarr," meaning "from the marsh." Kiarr is also the name of a king of Valland in Norse mythology. Although the village Walker was first recorded in 1242, its origin could have been much earlier, perhaps dating to early Viking settlements.

Modal haplotypes and the MRCA

Capt. Richard Walker and Samuel Walker are in haplogroup I-FT374569 and share common ancestors dating from the haplogroup's formation. The time to their most recent common ancestor (MRCA) can be estimated from the number of STR differences, or genetic distance, between their haplotypes. Although actual DNA samples for these two Walker immigrants are not available, their haplotypes can be estimated by determining the statistical mode, i.e., the value that appears most often, for each STR in the haplotypes of their respective descendants. These derived haplotypes are referred to as modal haplotypes.

By examining individual haplotypes from GP-12 and the I-M223 Y-DNA Haplogroup Project, modal haplotypes were

developed for Capt. Richard Walker and Samuel Walker, and also for their MRCA.²⁸ Similarly, modal haplotypes for the Walker haplogroups I-FT374569 and I-FT374890 were developed. A model haplotype for the parent haplogroup I-Y13037 was also derived as a base reference. These modal haplotypes with their STR differences are shown in Table 2. Only those STRs that differ from the base reference are shown in the table.

The modal haplotype for Capt. Richard Walker has one STR mutation at DYS557. This mutation, unique to the Capt. Richard line, occurred at some point between the MRCA and Capt. Richard's grandson Nathaniel. The modal haplotype for Samuel Walker has two STR mutations, one at DYS390 and one at DYS522, which occurred between the MRCA and Samuel.

Because the STR mutation in Capt. Richard's line could have occurred between Capt. Richard and his grandson, the genetic distance across 111 STR markers between Capt. Richard and Samuel is at least two, but no more than three. A genetic distance of two would imply that the two Walkers are closely related.²⁹ Because of the two one-step STR mutations unique to Samuel, he and Capt. Richard were unlikely to have been brothers. Statistically, they could have been first through fourth cousins at the 50% confidence level (i.e., the MRCA of five generations), or first through seventh cousins at the 90% confidence level (i.e., the MRCA of eight generations).³⁰

The above estimated MRCAs can be refined or bounded by examining the distribution of STR mutations that occurred after the formation of haplogroup I-FT374569. Six mutations occurred from this haplogroup's formation through the MRCA as shown in Table 2 and Figure 1, and an average of one and a half mutations occurred between the MRCA and the birth of Capt. Richard Walker and Samuel Walker. By applying the ratio of 1.5 mutations per 7.5 mutations to the no more than five-hundred-year interval between the formation of haplogroup I-FT374569 and the two Walker immigrants, a new MRCA estimate of no more than one hundred years, or three generations is obtained.³¹

Conclusion

Although the exact relationship between Capt. Richard Walker and Samuel Walker remains unknown, genetic genealogy has shown that a close kinship existed between the two Walker immigrants. Their most recent common

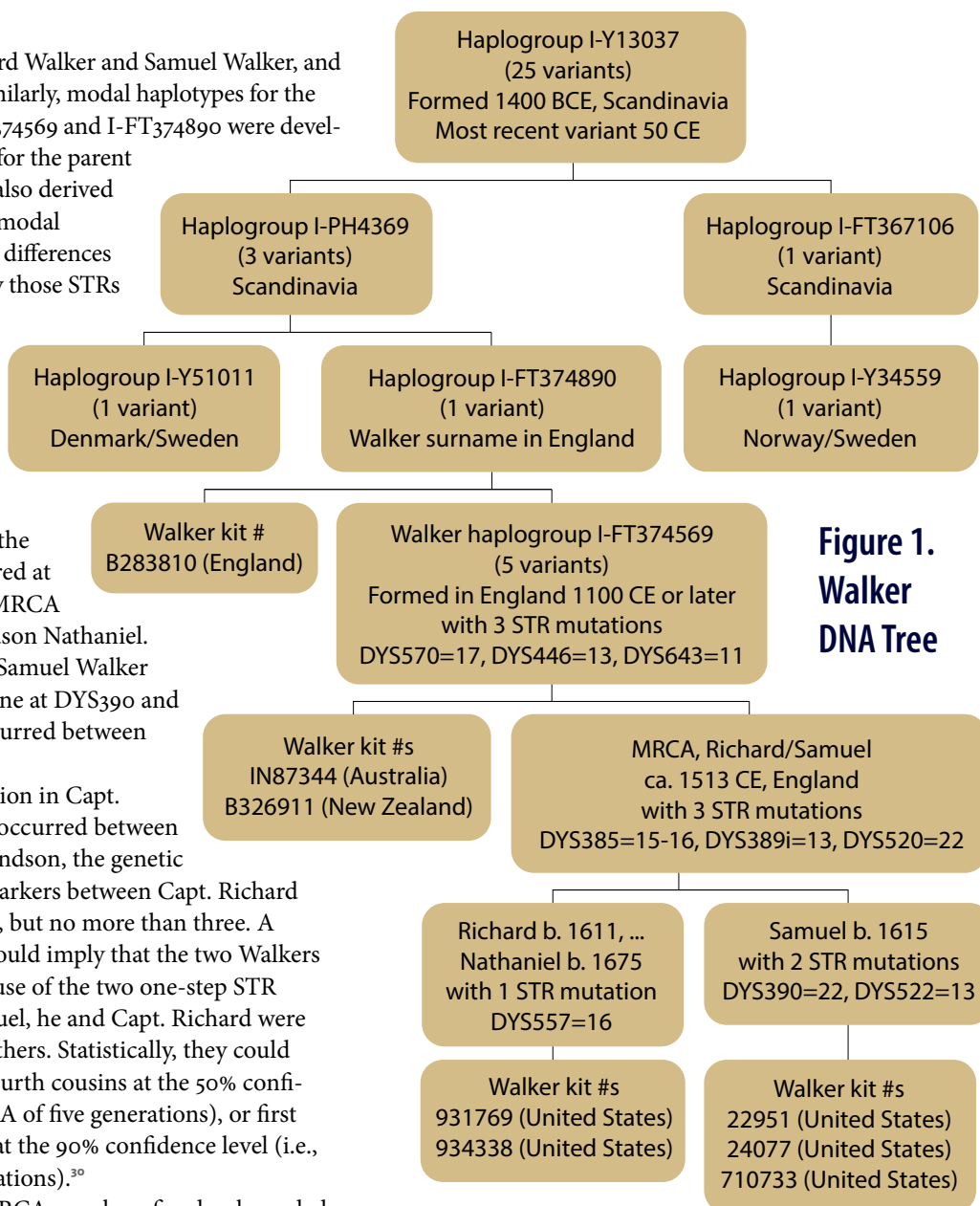


Figure 1.
Walker
DNA Tree

ancestor had a distant Scandinavian heritage and probably lived in England in the early sixteenth century. Based on this estimated date for the MRCA, we conclude that Capt. Richard Walker and Samuel Walker were likely first or second cousins. ♦

NOTES

- 1 Robert Charles Anderson, *The Great Migration Begins: Immigrants to New England 1620–1633* (Boston: NEHGS, 1995), 3:1908.
- 2 Oliver Ayer Roberts, *History of the Military Company of the Massachusetts, Now Called the Ancient and Honorable Artillery Company of Massachusetts, 1637–1888* (Boston: Alfred Mudge & Son, 1895), 1:8.
- 3 Lilley Eaton, *Genealogical History of the Town of Reading, Massachusetts* (Boston: Alfred Mudge & Son, 1874), 3–4.
- 4 Anderson, *The Great Migration Begins* [note 1], 3:1908.

Table 2. Modal Haplotypes Showing Mutations Across 111 STRs

| Modal Group | Haplogroup | STR DYS#s | | | | | | | | |
|---|------------|-----------|-------|------|-----|-----|-----|-----|-----|-----|
| | | 390 | 385 | 389i | 570 | 557 | 520 | 446 | 522 | 643 |
| I-Y13037 | I-Y13037 | 23 | 15-15 | 14 | 18 | 15 | 20 | 11 | 12 | 12 |
| I-FT374890 | I-FT374890 | 23 | 15-15 | 14 | 18 | 15 | 21 | 11 | 12 | 12 |
| I-FT374569 | I-FT374569 | 23 | 15-15 | 14 | 17 | 15 | 21 | 13 | 12 | 11 |
| MRCAs, Richard/Samuel | I-FT374569 | 23 | 15-16 | 13 | 17 | 15 | 22 | 13 | 12 | 11 |
| Richard ¹ , ... Nathaniel ³ | I-FT374569 | 23 | 15-16 | 13 | 17 | 16 | 22 | 13 | 12 | 11 |
| Samuel ¹ | I-FT374569 | 22 | 15-16 | 13 | 17 | 15 | 22 | 13 | 13 | 11 |

- ⁵ Samuel Sewall, Charles Chauncey Sewall, and Samuel Thompson, *The History of Woburn, Middlesex County, Massachusetts* (Boston: Wiggin and Lunt, 1868), 60–61.
- ⁶ Reading, Mass., Town Records, 1638–1814, FHL 886199, image 122 [volume 1, page 1].
- ⁷ Robert Charles Anderson, *The Great Migration Directory: Immigrants to New England, 1620–1640* (Boston: NEHGS, 2015), 356.
- ⁸ Reading, Mass., Town Records [note 6], images 123 [volume 1, page 2] and 125 [page 7].
- ⁹ Ibid., image 130 [volume 1, page 17]. “Town meeting held upon the 12th of the 11th Month 1653. . . . Given to Mr. Haugh the course of Swamp from the marked tree, between Capt. [Richard] Walker, Henry Felth and Samuel Walker, straight over to William Lawkins.”
- ¹⁰ Alonzo Lewis, *The History of Lynn* (Boston: Press of J. H. Eastburn, 1829), 31–32.
- ¹¹ Melinde Lutz Sanborn, *Ages from Court Records, 1636 to 1700*, vol. I, Essex, Middlesex, and Suffolk Counties, Massachusetts (Baltimore: Genealogical Publishing Co., 2003), 210.
- ¹² James Savage, *The First Settlers of New England* (Boston: Little, Brown and Company, 1860–1862), 4:395–96; Sewall, Sewall, and Thompson, *History of Woburn* [note 5], 169–170; Eaton, *Genealogical History of Reading* [note 3], 123; and E[verett] W. Foster and Philip Walker, “The Walkers of Woburn, Massachusetts,” *The Historical Bulletin* 5 (1904): 110.
- ¹³ Arthur G. Loring, and William R. Cutter, “Samuel Walker of Woburn, Mass., and Some of his Descendants,” *New England Historical and Genealogical Register* 57 (1903): 350–51.
- ¹⁴ Charles E. Mann, *The Three Lynn Captains: Robert Bridges, Thomas Marshall and Richard Walker* (Lynn, Mass.: Frank S. Whitten, 1911), 26–27.
- ¹⁵ Colonel E[verett] W. Foster, “Walker: A Genealogy Giving Some of the Descendants of Samuel Walker of Woburn, Mass.,” *Boston Evening Transcript*, July 2, 1928; Ernest George Walker, *Walkers of Yesterday* (Washington, D.C.: Ransdell Inc., 1937), 4; John G. Hunt, “Ancestry of Samuel Walker (c. 1616–84). Brewer of Woburn, Mass.,” 1966, 2 pp., File Case Families Collection, NSDAR Library, Washington, DC; and Mann, *The Three Lynn Captains* [note 14], 24.
- ¹⁶ Ugo A. Perego et al., “The Science of Molecular Genealogy,” *National Genealogical Society Quarterly* 93 (2005): 245–59.
- ¹⁷ Ibid., 252–54.

- ¹⁸ FamilyTreeDNA, familytreedna.com/products/y-dna.
- ¹⁹ Walker Surname DNA Project, familytreedna.com/groups/walker-dna-project-mt-dna-results/about.
- ²⁰ Anderson, *The Great Migration Begins, 1909–10* [note 1]. Capt. Richard Walker was married twice, and by his first wife, Jane Talmage, had one son, Shubal, and by his second wife, Sarah (____), had sons Nathaniel and Obadiah. The project has two other Capt. Richard descendants, not in group GP-12, who do not match any of the more than 1,400 project members. As their DNA is considered to be the result of non-paternity events, these members are not included in this study.
- ²¹ Richard³ (*Shubal², Richard¹*) had only one son, Richard⁴, who died in 1724 at 17; Obadiah³ (*Shubal², Richard¹*) died young; Nathaniel² had no known issue; Obadiah² had only one son, Samuel³, who died unmarried in 1691 at 19.
- ²² FTDNA, I-Haplotree, familytreedna.com/public/y-dna-haplotree/l.
- ²³ George English, “Surname Formation in Britain,” Scotland and the Flemish People project, University of St Andrews, May 22, 2015, flemish.wp.st-andrews.ac.uk/2015/05/22/surname-formation-in-britain.
- ²⁴ FTDNA, The I-Y13037 Story, discover.familytreedna.com/y-dna/l-Y13037/story.
- ²⁵ FTDNA, I-Haplotree [note 22].
- ²⁶ Jane Kershaw and Ellen C. Rørvik, “The ‘People of the British Isles’ project and Viking settlement in England,” *Antiquity* 90, no. 354 (December 2016): 1670–80. doi.org/10.15184/aqy.2016.193.
- ²⁷ Eilert Ekwall, *The Concise Oxford Dictionary of English Place-Names*, 4th ed. (Cambridge University Press, 1960), 492.
- ²⁸ I-M223 Y-Haplogroup Project, familytreedna.com/groups/m223-y-clan/about.
- ²⁹ “If Two Men Share a Surname, How Should the Genetic Distance at 111 Y-chromosome STR Markers Be Interpreted?,” FamilyTreeDNA Learning Center, learn.familytreedna.com/y-dna-testing/y-str/two-men-share-surname-genetic-distance-111-y-chromosome-str-markers-interpreted.
- ³⁰ Ibid.
- ³¹ Donn Devine, “How Long is a Generation? Science Provides an Answer,” *Ancestry Magazine* 23, no. 4 (September–October 2005): 51–53; 33 years for male lines and 29 years for female lines.