

DNA Discoveries

By **Susan C. Meates**

Adding a DNA Project to a One-Name Study is a tremendous opportunity to discover information beyond the paper records. This information can identify mistaken connections in family trees, is useful in investigating theories or sorting out multiple families in the same location, and is invaluable in investigating surname origins, surname evolution, and confirming variants, or even discovering unknown variants.

In this two part article series, a variety of Guild members have shared their experiences with DNA testing for genealogy.

If you are interested in adding a DNA Project to your one-name study, help is available. No scientific knowledge is required. Many of the paper records we deal with are more complicated than a DNA Project. The help available includes a guide to comparison charts and articles to help with vendor selection, project set up with proven marketing material, example recruiting emails/letters, analysis and tracking tools, and questions answered. If your registered surnames are already in a DNA Project, and you want to get involved, help is available to analyze the situation, determine your options, and if desired, negotiate a role as co-administrator for you. To get help, write me at DNA@one-name.org.

The benefits of a DNA Project are significant, and you can proceed at your own pace. The longer your DNA Project exists, typically the higher your number of participants. For example, the Wells DNA Project established in 2000 now has over 500 participants, the Phillips DNA Project established 2004 has over 480 participants, and the Meates DNA Project established in 2001 has over 300 participants. Both the Chandler project, 2003, and the Cotton project, 2002, have over 200 participants. More Guild members' projects have also moved into the "over 100 participants" category.

A variety of factors have an impact on project size, including surname frequency, recruiting efforts, and fund raising efforts.

In the second part of this 2 part article, more DNA Projects will be covered, and educational links will be provided.

Below are DNA Project summaries submitted by various Guild members.

Ricketts DNA Project

Salli Dyson, Family Tree DNA
Established 2009, 59 Participants

When starting the Ricketts one-name study, over 40 years ago, the frequency of the surname worldwide was not known. As the study progressed, the frequency became evident and sorting out the various trees can be overwhelming at times. In the USA, there are over 10,000 adult Ricketts, and in the UK, over 6,000 Ricketts, as well as multiple variants in both countries, and many other countries (including Argentina) with Ricketts and variants.



Fig. 1 George William Ricketts, a son of George Ricketts born c 1680.
Picture Courtesy of the Lt Co HC Ricketts Will Trust.



Fig. 2 George Ricketts c 1680-1760
Picture Courtesy of the Lt Co HC Ricketts Will Trust.

Preliminary research in early records indicates an estimated 25-60 origins for the Ricketts surname, with probable surname evolution from surnames such as Rackett and Rockett. My one-name study includes Ricketts and close variants, and the DNA Project includes additional surnames beyond the one-name study, to explore surnames which are candidates for possible surname evolution.

The DNA results to date show 17 Genetic Groups, where each group represents a different common ancestor. Only 7 trees have a match to another tree, with all the other trees being unique results. There is one group of 5 trees that match, and another group of 2 trees that have a common ancestor. The balance of 15 Genetic Groups only contain one tree so far.

The DNA Project commenced in March 2009, and has been extremely valuable in sorting out various Ricketts family trees. Where possible, we've tested two or more branches of a family tree, and DNA testing has identified mistaken connections in a variety of family trees. In addition, the DNA Project has established the ancestral result for the Ricketts of Jamaica, and this accomplishment has disproved multiple genealogies on the Internet regarding USA trees descending from the Ricketts of Jamaica..

Even with a multiple origin surname, with 25-60 origins estimated, using targeted recruiting in the UK, we achieved a trans-Atlantic match with our first 5 test kits placed in the UK.

37 Marker DNA Results for a Ricketts Tree. This tree is also known as the Jamaica Ricketts

Each man tested represents a different son of George Ricketts, b c 1680, who died in 1760 in Canaan, Jamaica.

Son of George Represented	Result																																				
Jacob b 1723	13	24	14	11	11	14	12	12	12	13	13	29	18	9	9	11	11	25	15	19	30	15	15	16	17	11	11	19	23	16	14	16	18	37	38	12	12
William Henry b 1736	13	24	14	11	11	14	12	12	12	13	13	29	17	9	9	11	11	25	15	19	30	15	15	17	18	11	11	19	23	16	14	16	18	37	38	12	12
George William b 1760	13	24	14	11	11	14	12	12	12	13	13	29	18	9	9	11	11	25	15	19	30	15	15	17	18	11	11	19	23	16	14	16	18	37	38	12	12

The markers highlighted in green represent mutations since George c 1680. The result for George c 1680 is the result shown for the man representing the son George William b 1760 Jamaica, the third line of results in the chart. We know that this result is the ancestral result for George c 1680, based on each marker matching the other participants, except the two markers where there are mutations. Where there were mutations, by testing descendants of 3 different sons, we have sufficient data to determine the ancestral result, since 2 of the 3 men match on each marker in question. In addition, this level of mutation over 3 centuries is very reasonable, and validates the genealogy research.

The Ricketts DNA Project has participants from a variety of countries, and we are still in the early stages.

One surname origin has been discovered, from research in early records, and then parish registers. As persons moved away from the manor of Rycote, Oxfordshire, they were first recorded as de Rycote, and later just as Rycote. In the 1600s, in one parish, there was a period of recordings that went back and forth between Rycotes and Ryketes/Reckots/Rickots, finally stabilizing as Ricketts in the 1700s. It also appears from early records that multiple persons at different times moved away from the manor, to different places, and became de Rycotes. Most likely each of these males had a different Y-DNA result, so we will end up with multiple Y-DNA results from this one locative surname origin.

I am the co-administrator of the DNA Project.

DNA testing has been invaluable, and we have been fortunate to secure samples from elderly males, often the last male in a tree.

Chandler DNA Project

Dick Chandler Family Tree DNA
Established 2003, 272 participants

The Chandler surname DNA project has participants tested by Family Tree DNA and, by careful scrutiny of the YSearch database and other sources, we have secured the Y-DNA result for a number of additional Chandlers who have tested with other laboratories. We have several tri-continental matches, and to date 57 genetically distinct Chandler families have been identified. The project was initiated by the American Chandler Family Association (CFA), comprising

members who believed themselves to be descendants of 1610 immigrant John Chandler. The three most significant discoveries so far have been:

1. A significant minority of CFA members are not descended from 1610 immigrant John, but from several different ancestors. Some Chandlers who have been neighbours for generations, and considered themselves to be kin, have been found not to be so. This caused the project to expand its target coverage, to attempt to embrace all Chandlers worldwide.

2. An Englishman with unbroken 12-generation English Chandler ancestry, traced back to a 1575 christening in Hampshire, has proved to be a 35/37 match with the descendants of 1610 immigrant John. Unexpectedly, that testee was Dick Chandler, conductor of the Chandler One-Name Study! The common English ancestor, probably in the early 1500s, is still being sought.

3. A genetic family with four participants living in Barbados and Australia were found to have a common ancestor in Barbados, but one of the Australian lines descended from the illegitimate son of a white teacher and the daughter of a freed slave. As often occurred in Barbadian society, the "outside child" was reared and educated with the legitimate children.

Chandler is an occupational surname and was therefore assigned to many unrelated families in England during the period when hereditary surnames were acquired. In order to estimate the likely number of genetic Chandler families in existence, the transcription of surviving English Poll Tax records of 1377, 1379 and 1381 were examined line by line for occurrences of names approximating to Chandler. The resulting surprisingly

small number was adjusted upwards to take account of lost tax records, untaxed individuals, clergy taxed separately and other factors, then downwards to take account of line extinction and other factors. The resulting number of genetic families was in the range 100 to 200. Taking the mid-point of that range, the Chandler DNA project could be said to have so far found representatives of about one-third of the estimated number of genetic families.

To try to attract more DNA project participants, a montage of genetic Chandler family vignettes is being assembled on the CFA web site: an index of the 57 families and the stories completed so far can be viewed starting at http://www.thecfa.org/genetic_chandler_families.html.



Fig. 3 Guild member Dick Chandler congratulating one of their DNA testees, the adopted son of an adopted son, born in Korea of an American father and a Korean mother and adopted by a Japanese family. DNA testing in conjunction with the Chandler family association has given the adoptee a genetic family and a male lineage

Creer from the Isle of Man DNA Project

John A Creer (Creer ONS)
Family Tree DNA

Established 2005, 28 participants

Creer is a low-frequency name which can be traced back to a small farming area in the centre of the Isle of Man as far back as 1500. Conventional genealogical research, in the form of a one-name study, had by 2005 largely exhausted all existing documentary sources and had produced a number of Creer family groupings/trees that could be assumed were connected with each other, but without corroborating documentary evidence. No further progress was being made.

In 2005 a Y-DNA study was initiated, selecting Creer males from around the world, for whom there was at least eight generations of documented genealogy, with at least two members from each major family grouping (for cross-validation) and no-one being closer than third cousin (to avoid unnecessary testing). 19 out of 26 men tested showed a very close spread of Y-DNA haplotypes at 25 markers (a maximum genetic distance of three apart) indicating a close genetic connection. The remaining seven results showed no commonality and were assessed as non-paternal events.

Analysis of the genetically similar Y-DNA results showed that a clear



Fig. 4 Edwin Creer

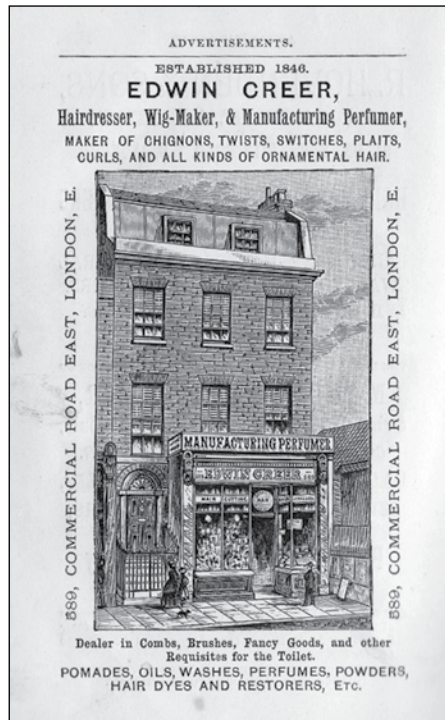


Fig. 4 Edwin Creer's Shop

genetic "family tree" (phylogenetic tree) could be constructed for these Creer family groups and this evidence fitted extremely well with the pre-existing genealogy picture. Furthermore, it indicated that all these Creer men were descended from one male who, by statistical extrapolation of the data, most probably lived on the Isle of Man sometime between 1200 and 1400. This again fits well with the external evidence.

The study is now complete and the combination of the Y-DNA analysis, backed by the extensive genealogy documentation of a one-name study, has proved for the first time that all the Creers from the Isle of Man (many now scattered around the world) are all descended from one early Manx man. Moreover, subsequent deep clade Y-DNA analysis is providing some genetic evidence that this early Creer male may well have been of Viking origin, offering now another tantalizing avenue of research.

Catley/Cattley DNA Project

Tim Cattley Family Tree DNA
Established 2006, 11 Participants

I have been instrumental in instigating Family Tree DNA testing the Catley/Cattley name with listers on Rootsweb Catley in order to see if any connections could be made between the 32 different lines that have so far been identified.

The name distribution appeared to be regional by the 17th century with centres in a) Somerset, b) London/Essex/Herts, c) Lincs/Notts and d) Yorks/Lancs.

Could DNA testing find any connection and a common source to prove the theory that the name was in some way originally connected by a lay ancestral association with the Gilbertine monastic settlement of Catley (or Cattlely) out in the Lincolnshire Fens that was founded in 1143 AD?

Of the 32 known lines, we have Listed members for 21 of them and to date we have 11 DNA results, which has produced one three-way match, two two-way matches and four nil matches. This indicates that there are certainly seven unconnected lines and thus disproves the single source theory (which was always wishful thinking!) and confirming that different families in different parts of England simply by coincidence chose the same place name, Cat*ley = wild cat wood.

The DNA matches have not produced any startling discoveries but do confirm that certain "regional trees" have a common ancestry which although considered likely, could not be proven through lack of written evidence.

Bolt DNA Project

Katherine Borges Family Tree DNA
Established 2003, 39 Participants

The Bolt DNA Project has been critical in sorting out family trees, especially where the documentation has been insufficient to draw accurate conclusions. Initially the focus was the USA, and then the project was expanded globally. The natural progression was then to a one-name study, which was started in 2007.

The Bolt surname is found in many different countries, with the highest concentration in the Netherlands, followed by Switzerland, Canada, Australia, and the UK. Mapping the surname on a global basis indicates multiple origins in multiple countries. In the UK, the highest concentration is in Devon. Mapping the surname with the UK Census shows that almost every county has some Bolt persons, indicating multiple origins within the UK.

The DNA evidence has supported these observations, since there are multiple different results. One primary

goal is making connections between trees in destination countries to trees in ancestral countries.

The Bolt DNA Project provides sponsored test kits for any male Bolt in an ancestral country.

Caverly / Caverley / Calverley / Cavalier DNA Project

Paul Caverly Family Tree DNA
Established 2004, 21 Participants

Recently I made contact with a 90 year old genealogy researcher in Surrey . This gentleman could trace his CALVERLEY surname ancestry back 900 years to the Leeds area. The CALVERLEY surname is a variant I want to explore but was waiting to make such a contact as my new contact. He has been good



Fig. 5 George (1854-1931)
& Matilda Caverly
Hastings County, Ontario, Canada

enough to send me all of his years of research including Civil Records documented over the years. He has also agreed to join my DNA Project. My DNA Project has a number of members with my CAVERLY surname but only one other CALVERLEY member. References in several UK surname dictionaries conclude the Caverly/Caverley surnames derived from the Calverley surname. One day DNA may help confirm or disprove this theory.

The project is small with 21 members but open to anyone who has an interest in any variants of the surname. ■