

The Button Files

Newsletter of the Warburton Society

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The Warburton Website: <http://warburtontrees.net>

Contents

The Newsletter.....	1
Warburton One-Name Study	1
DNA Indicates Warburtons' Norman Ancestry	2
My Warburton Theory	3
Is Warburton Single Origin?.....	4
The Cheshire Group	5
The Big Y Test and Results.....	7
The Future	8
Next Issue	10

The Newsletter

Welcome to the ninth issue of **The Button Files**.

This is the first newsletter I have produced for a year. This is partly due to lack of time, particularly as I developed my new website, and partly due to a lack of urgent subjects. Also since the new website is essentially a blog I can post matters of interest as they arrive.

However there have been significant developments on the DNA front and I think that warrants a Newsletter in its own right. I have structured it as a series of articles as follows:

- **DNA Indicates Warburtons' Norman Ancestry**
This is an overview of the material in the subsequent articles which I hope might form the basis for articles that might appear in other Journals.
- **My Warburton Theory** In order to assess what we might know I have adopted a scientific approach of setting out a theory that best explains the known facts. As new information comes to light this theory may be strengthened, invalidated, or need modification.
- **Is Warburton Single Origin?** Whilst the name Warburton derives from a single geographical location, a recent article in the Journal of One Name Studies suggests there are too many Warburtons to have been descended from a single first Warburton.

- **The Cheshire Group** The most significant development is the identification of a matching group of Warburtons and Duttons which appears to descend from Odard de Dutton, and which forms a group within a larger group called The Kings Cluster. The Warburton half of this group is the Cheshire group comprising 10 matched DNA results. This article describes the members of the group, their Dutton match, and the Kings Cluster.
- **The Big Y Test and Results** Big Y is a new DNA test from Family Tree DNA. Warburton and Dutton results are advancing our knowledge of the Warburton-Dutton group. This article attempts to describe the test and how it is significant.
- **The Future** This article discusses the implications for the Warburton DNA Project, including the Lancashire group of 5 matched results, and strategies for testing for group membership.

I would like to acknowledge the inputs and help of Iain McDonald who manages the Kings Cluster within the **R1b-U106 Haplogroup Project at Family Tree DNA**.

Warburton One-Name Study

As developments with the One Name Study are posted on the Warburton Website it would be superfluous to repeat them here. After a year it is difficult to remember them anyway.

My old website still exists to provide a link to my new one, but it is now frozen. Interestingly the hit count advanced from 8041 to 9012 since the last newsletter, but this is dwarfed by the new site which has 58,058 hits, and 352 subscribers.

In the last newsletter I said I intended to focus on the parish records for Lymm and Warburton, and to use them to extend various clans, including the material Cathy sent me a while ago. Over a year later this is still my intent, even (almost) the top of my to-do list. I just have a few updates to publish first.

The Warburton Website

I subscribed my contacts list to the new website. A few people unsubscribed, and there have been just a few new subscribers. All subscribing does is ensure you receive an email whenever I put a new post on the website. There have been 47 posts since July 2013. Should I go mad and produce several posts in one day you will only receive one email to cover all of them.

There is a facility to comment on any post or page on the website and there are 81 on there at the moment, including 22 of my replies. The first comment from a new

The Button Files

commenter has to be approved by me (I get a few SPAM despite a good SPAM blocker), but once that is done future comments should appear immediately.

Comments have the advantage that they are available to anyone who cares to look, but they have the disadvantage of being spread around the website.

My preferred method of communication is email, because I can file these, including my replies. I also add notes to my contacts list because it is impossible to remember what went before if someone re-contacts me a few months after an original conversation.

If you just wish to communicate with me it is better to use email than to comment. If you have something you would like to communicate to all subscribers it would be best to email me and ask me to post it. Comments are best when they are specific to the page or post they are attached to.

There is a facility to email me from the website. Just click on my picture and you should get a blank email to complete. However, if you use a browser based mail system (webmail) it might not support this function. I have had a few messages that people have found it doesn't work for them. If you hover your cursor over the picture you should see a message with my email address.

My email address at the top of this newsletter is ray1warburton@talktalk.net. The website will generate an email to ray3warburton@talktalk.net. This is so I know where it is from and you will probably get a reply from the ray1 address (if I remember to change it).

Notifications of posts are generated automatically and sent from an email address associated with the website. I cannot send emails from this address, unless I use webmail. I can see any replies to the notification email but it is better to write to me directly.

The Warburton Society

My concept of the Warburton Society has gone through a number of iterations over the years, including 'Recipients of the Newsletter', and 'Friends of the Warburton One-Name Study' which was a private group I set up on **Facebook**. Since I started the new website I rarely use **Facebook**. I certainly don't put anything on it, or spend much time looking at what others do on it. I do have a page about the study as an advert/signpost, and I do try to respond to messages. I tend to only accept Friend requests if their name is Warburton, or they have expressed interest in the project.

Now my concept of the Warburton Society is simply those subscribed to the website, though there may be others who simply drop in from time to time to see what is happening. They will be able to access the newsletters, and anything else on the site, but may never try to get in touch.

The DNA Project

The DNA Project now has 35 Warburton members, two Duttons, and two others who have used it as an umbrella, being related to Warburtons but not Warburtons themselves.

As this whole newsletter is a DNA update all I will say here is that I hope it will inspire more people to join, or to contribute to the project's General Fund. This currently stands at \$90 and any amount, however small, would be welcome.

It is used to subsidise the purchase of tests for people who are unable or unwilling to fund it for themselves. Sometimes I identify people whose result might be useful to the project, and whilst they usually agree to take the test, they don't always want to pay.

DNA Indicates Warburtons' Norman Ancestry

In 1970 Norman Warburton published a book Warburton: The Village and the Family in which he described how the aristocratic Warburton family of Arley Hall in Cheshire were descended from a Norman knight named Odard. Odard was granted extensive lands and established his abode at Duttune or Dutton, becoming styled as Odard de Dutton. The Warburtons were thus identified as a branch of the Duttons.

Norman Warburton considered that modern Warburtons were all descended from various cadet branches of the original Warburton family. However an interesting article by Dr. John and Professor Richard Plant (Populous Single Origin Families: Computer Modelling) in The Journal of One Name Studies Jan-March 2014 would suggest this is unlikely. The approximately 8,000 Warburtons in the 1881 UK censuses is larger than might be expected for a single origin family. Almost certainly there were multiple adopters of the Warburton name, though the distribution of the name indicates that all the adopters were associated with the village of Warburton. This lies on the Cheshire side of the border between the historic counties of Lancashire and Cheshire.

Recently great excitement has been generated by a DNA match between a group of Warburtons (referred to as the Cheshire group) and a group of Duttons. The Warburton group has 10 results, including mine, out of 35 in the Warburton DNA Project. The Dutton group has 8 members, mainly from the USA, from a total of 40 results, though a couple of these are known to be cousins. Additional testing shows that the two groups are indeed closely matched.

These additional tests included 111 marker STR (Short Tandem Repeat) tests, and one test from each side using Family Tree DNA's new Big Y test, which is a comprehensive SNP (Single Nucleotide Polymorphism) test.

What might this match mean? The most likely explanation is that it results from the known historic link described in Norman Warburton's book. Our common ancestor would be Odard himself, who was probably born around 1040AD, or one of his descendants, up to Sir Geoffrey de Dutton who was born around 1200AD and had two sons, one of whom, Piers, adopted the style of Sir Piers de Werberton.

However there are other possibilities so the link to Odard cannot yet be considered proven. There may have

The Button Files

been a later non-paternal event resulting from a liaison between a Warburton and a Dutton. Both names originate from Cheshire villages and spread over a similar area and there are several recorded Warburton-Dutton marriages. It is also possible that two descendants of an earlier common ancestor coincidentally adopted Warburton and Dutton as their surnames.

Can DNA determine whether the two groups are indeed descended from Odard de Dutton? The answer is not yet, though it is possible that in time, and in conjunction with the genealogical evidence, it could strengthen the probability they are descended from Odard, and possibility eliminate one or both of the other possibilities.

One line of study is to use calculations for determining the age of a common ancestor from how close an STR match is. These calculations are still relatively young and may be adjusted, or even superseded by new calculations based on SNP tests. They also produce a wide range of possible dates. I have done a number of calculations comparing individual Dutton and Warburton DNA results and the conclusion they support is that they are consistent with a common ancestor who was born between 1040AD and 1200AD. These calculations are covered in some detail on my website at <http://warburontrees.net>.

SNP testing has introduced a new dimension to the story. I got an initial SNP result by taking the National Geographic's Geno 2.0 test. This produces your most recent SNP or mutation, as well as a list of earlier ones. Mine was identified as Z306, a mutation that occurred about 4300 years ago (calculated as 2155 BC BC with a 95% confidence level between 2923 BC - 1591 BC) in western Germany. A slightly earlier SNP was U106 which meant I could join an extremely active Family Tree DNA project (the R1b-U106 project). Within that project I have now been categorised within a group called The Kings Cluster, based on a further SNP called DF98 which occurred shortly after Z306.

The Kings cluster is so named because it includes half the royal families of Europe. Its members have sat on the thrones of Britain, Belgium, Bulgaria, Portugal and Saxony. The Warburton-Dutton groups last link with these royal families is around 4200 years ago so the Queen is probably about our 120th cousin.

Our BigY results show Warburton and Dutton forming a unique group in one section of the cluster and sharing no fewer than 27 exclusive mutations as well as each having a number of unique results. The sheer number of mutations uncovered by the Big Y tests indicates, on current estimates, that mutations occur every 118-169 years. At this rate of mutation the Warburton-Dutton group must have separated from its nearest cousins within the Kings Cluster soon after the DF98 mutation, probably over 3,000 years before the Warburton-Dutton common ancestor lived. Also the number of mutations since the Dutton-Warburton common ancestor, particularly on the Dutton side, suggest the chances he was born later than 1200 are small.

The U106 haplogroup, including the Kings Cluster are Germanic in origin and were mainly introduced to the UK by the Saxon invasions of Britain. This contrasts with the

historical evidence that points to a Norman origin for the Warburtons and Duttons. However the Warburton-Dutton group separated from its nearest cousins at an early date and had plenty of time to spread through NW Europe and reach Normandy. In time we may get new results from people who share some of our 27 exclusive mutations, and so can help to fill in the 3,000 year gap between our separation from the rest of the Kings Cluster, and the birth of our common ancestor.

The next few months promise exciting discoveries. One development is the availability of new, cheaper strategies for Warburtons to determine if they are amongst the 50% + of Warburtons who belong to the Cheshire group of Warburtons (i.e. those linked to the Duttons), or one of the other Warburton groups. For example any Warburton who is positive for DF98 can be considered a member of the Cheshire group, and this test is only \$39. Just to test for DF98 would be a shot in the dark, with nothing gained if you prove to be negative. However a Y-12 test (\$59) would indicate whether a DF98 test, or some other test would be likely prove a match with one of the Warburton groups, or with one of the unmatched results.

Assuming there is no genealogical link to a member of a group, this 2-step approach, at \$100 plus postage is recommended to anyone simply seeking to prove a link to an existing group as it is a considerable saving on the 37 marker Y-STR test normally used by the Warburton DNA project which costs \$149 (maybe \$119 during promotions).

Further down the road it will be possible to identify mutations that are specific to the Warburton group and use these to structure the Warburton group better. For example

I have 6 unique mutations that are not even shared with the Duttons, but other members of the Warburton will share some, and have unique ones of their own.

My Warburton Theory

Scientific Method

DNA testing has introduced an element of science to genealogy. It seems appropriate, therefore, to apply the scientific method to the subject as a whole. Professor Richard Feynman, an American physicist and Nobel prize winner, described the scientific method in one minute during a lecture at Cornell University in 1964. This link: <http://m.youtube.com/watch?v=EYPapE-3FRwq> is to a 10 minute YouTube extract of the lecture. The first minute outlines the scientific method as follows:

"In general, we look for a new law by the following process: First we guess it; then we compute the consequences of the guess to see what would be implied if this law that we guessed is right; then we compare the result of the computation to nature, with experiment or experience, compare it directly with observation, to see if it works. If it disagrees with the experiment, it is wrong. In that simple statement is the key to science. It does not make any difference how beautiful your guess is, it does not make any difference how smart you are, who made

The Button Files

the guess, or what his name is—if it disagrees with experiment, it is wrong. “

He later explains that you can never prove that your guess, or theory is right. You can prove that it is wrong, or you can show that your results are consistent with it being right, but you never be sure that something won't show up in the future which shows that some part of it at least, is wrong.

So in the spirit of Feynman I am going to propose my Warburton theory in the hope that as results become available, whilst the theory may need to bend, it will never break.

My Warburton Theory

A large proportion, but not all modern Warburtons are descended from a Norman knight, Odard, later known as Odard de Dutton. Odard himself was descended from a minor noble family whose ancestors were already in Normandy when Rollo became the first Count of Normandy in 911AD. However he may have been directly descended from the earlier Dukes of Normandy on his mother's side.

Odard carried a y-chromosome that indicated kinship with half the royal houses of Europe, including the Queen, though our common ancestor lived over 4,000 years ago.

One line of Odard's descendants acquired the manor of Warburton, a village on the Cheshire bank of the river Mersey that was established around 915AD as a fortified settlement by Ethelfleda (Aethelflaed), the Queen of Mercia. This line took the name Warburton, but the main line died out in 1813. However a number of cadet branches flourished and their ancestors are represented today by the Cheshire group of Warburtons who have matching Y-chromosome DNA.

At least some of the Cheshire group are descended from William Warburton, the son of Piers (the first to adopt the Warburton, or de Werberton name) and his second wife Harwise.

The Evidence

My Warburton theory is consistent with the DNA evidence discussed in this newsletter. That is not to say that other possible explanations have been discounted, they just seem less likely at this time.

My Hale Branch

I also have a theory about the arrival of my direct ancestors in Hale. They arrived in Hale around 1485 when they were granted lands at a peppercorn rent for services rendered to the then Lords of the manor, the Stanley family. These services were related to the Stanley's support of Henry Tudor (later Henry VII of England) at the battle of Bosworth Field.

It is unlikely that this theory can be definitively proven. Nevertheless it is the most logical explanation for the known facts, which are, in no specific order.

1. There are medieval lists of the freemen of Hale in the Stamford Estate papers, the last dated 1421? There are

no Warburtons in these lists suggesting they arrived in Hale after that date.

2. There are a number of Warburton families in Hale when records become abundant after 1600, including my direct ancestors, suggesting they had been there some time.

3. There is an area of Hale known as Warburton Green, about one mile from Hale Barns where my ancestors estate is located. This also suggests a significant presence.

4. As a result of a 1433 settlement of the disputed de Massey (later the Stamford) estates, one half of the manor of Hale was acquired by the Stanley family and held until the early 17th century. My ancestor's estate, and parts of Warburton Green, were on the Stanley estates.

5. Eighteenth century rent books show that my ancestors paid a Chief Rent of six and a half pence to The Lord of the manor for their estate. Similar arrangements in Hale (e.g. the Davenports and Danyers) are believed to signify land granted for services rendered.

6. In the late 15th century the Wars of the Roses were being fought in England. The Stanley family were a powerful family in north-west England, and Sir Piers Warburton, Lord of the manor of Warburton and other lands, was a loyal supporter. The Wars of the Roses were ended in 1485 when Henry Tudor defeated King Richard III at Bosworth and assumed the crown as Henry VII. His victory was made possible by the support of the Stanleys' forces led by the brothers Thomas and William Stanley.

7. DNA evidence shows that my ancestors were related to Sir Piers Warburton. Kings This is not a fact; it is the Warburton theory described above. On the other hand the evidence of both Piers and my ancestors receiving favour from the Stanleys suggests a familial relationship between the two families.

8. Sir Piers son John was “knight of the king's body” to Henry VII, as well as Sheriff of Chester from 1495. He married the daughter of Sir William Stanley of Holt, Chamberlain to Henry VII (though William was executed in 1495 for supporting the pretender Perkin Warbeck.

Is Warburton Single Origin?

There were a pair of interesting articles in recent issues of the Journal of One-Name Studies which addressed the question of how large might a family be by the 1881 census if it was descended from a single originator who was born in 1311. The authors, Dr John Plant and Professor Richard Plant used what is called a Monte Carlo simulation to determine the possible outcomes based on the population growth of England over that period.

I am not going to explain a Monte Carlo simulation (it's way above my head) except to say that one million simulations were run generating random results from those possible from the known population growth.

The Button Files

The result was that 92.5% of lines die out, and the maximum was 730 active males. Active males represent about 16.7%-25% of the total population, so the total population would be 3-4,000.

Simulations were then run for different counties, and some such as Staffordshire at 1246 active males, produced larger results. Lancashire (658 active males) and Cheshire (577 active males) are slightly less than the English average though there are suggestions that SE Lancashire might have a higher result, though this might partly be the result of inward migration during the Industrial Revolution.

It is instructive to compare Warburton population numbers from the 1881 census. It is clear from the population distribution that the name has a single geographic origin, confirming its derivation from the village of Warburton. However the numbers seem too great for them all to be descended from one person, even though it is known the first Warburton was born about 80 years before 1311.

I included UK population numbers from Ancestry in my Origins and Statistics paper. This was done some years ago and a current search produces slightly different numbers. There are 7,359 Warburtons (exact spelling) in England, and a further 184 in the rest of the UK. If I include soundex and phonetic matches the number rises to 8,612 for England, and 208 in the rest of the UK.

I also tried to gauge the number of active males by searching for males aged 18-60. Concentrating just on England 2,067 of the 8,612 Warburtons, or 24% were males aged between 18 and 60. This is nearly three times the one-in-a-million chance of 730 active males from the Monte Carlo simulation and suggests there were multiple originators of the Warburton name associated with Warburton village. So far the Warburton DNA project has probably found two groups of results from descendants of one of these originators, the Cheshire group, and the Lancashire group. The simulations indicate that some lines could still be quite small despite the antiquity of their originator. Therefore it is possible that some of the unmatched results do represent an early originator, and there are still matches waiting to be discovered.

Ten of 35 DNA results, or 28%, belong to the Cheshire group. Also about 25% of the Warburtons in the various clan trees belong to the Cheshire group. Therefore we might assume that about 500 of the active males in England in 1881 belonged to the Cheshire group. This is a large but reasonable size for a single origin family, and it lends support to the theory that the originator lived in the 13th century. It is also reasonable that the matching Dutton line might be smaller despite an even earlier originator.

The Cheshire Group

Introduction

The Cheshire Group is a group of 10 matched Short Tandem Repeat (STR) DNA results, including mine. The group has been linked to a group of Dutton results, and calculations of when our most recent common ancestor lived are consistent with the historical evidence that the first Warburton, Sir Piers or Peter de Werberton, was

formerly styled de Dutton, the change occurring circa 1260.

This article is a simplified version of one with the same title that is linked from the DNA Page of the Warburton Website. The website article includes a chart (a phylogenetic tree) which shows how the DNA results of the Cheshire Group link together. The results are identified by a letter which relates to that chart.

Two of the 10 Warburtons in the group have identical results, so there are 9 different DNA results.

The Cheshire Group Results

The following list describes the ancestry of each Cheshire group member, and shows how a combination of genealogical knowledge and the DNA results can be used to link some members more closely together.

1. The Greater Hale Barns clan encompasses the Hale Barns, Mobberley, and Ringley clans, and includes three results.
 - a. My own result (Me) is from the Hale Barns clan. My earliest known ancestor is George Warburton of Hale Barns (circa 1575-1639). It is likely the family were in Hale Barns from about 1485, so the most recent common ancestor for a Cheshire group member not known to be linked to the Hale Barns clan would have lived before this. However not all sons and grandsons of George's son John (1608-91) are accounted for so a member whose earliest known ancestor lived after 1700 might be linked.
 - b. This result (H) is from a member of the Mobberley Clan which is a line of the Hale Barns clan (separated only for reasons of size) that descends from John, the second son of John (1608-91). This member descends from Thomas (1672-1724), the grandson of John Warburton of Hale Barns (1608-91).
 - c. A result (A) from the Ringley Clan is from a member who descends from William Warburton of Ashton-upon-Mersey and Ringley (1740-1820). It is believed William was the grandson of Thomas of Moberley (1672-1724). Thomas is therefore the common ancestor of members A and H, and John Warburton of Hale Barns (1608-91) a common ancestor for all three of us .
2. Two identical results (B) are from descendants of John Warburton (1734 -1823) who was baptised at Newchurch Kenyon and lived at Houghton Green. They belong to the Houghton Clan. The DNA result is sufficiently close to those from the Greater Hale Barns clan to suggest a common ancestor who lived after my ancestors became established in Hale Barns. Also John's birth is late enough that it is possible there is an unknown link back to John of Hale Barnes (1608-91). However no evidence of a link has yet been found.
3. Two results have possible links to the descendants of William Warburton, the son of Sir Piers de Warburton and his second wife Harwise. Norman Warburton, in Warburton: The Village and the Family, records that William acquired an estate at Partington

The Button Files

according to deeds dated 1320. William's descendants continued in Partington until at least the 17th century.

- a. One result (C) is from a descendant of Hamlet Warburton of Warrington who died in 1700 (the Hamlet clan). The name Hamlet and its variants was used by the Warburtons of Partington but is not common elsewhere suggesting that this clan is descended from William of Partington.
 - b. A result (D) from the Pennsylvania clan comes from a descendant of a George Warburton who is probably the George, son of George of Partington who was baptised at Warburton in 1674, also suggesting the clan is descended from William of Partington.
4. The remaining three results share a genetic mutation with one of the two Partington related results, indicating a common ancestor. This suggests all five results might be from descendants of William. With the exception of the result originating from Flintshire, they all have an earliest known ancestor from the Warrington area which supports this theory. The degree of variation in the results suggests their common ancestor was an early Warburton.

- a. One result (F), which shares a mutation, and probably a more recent common ancestor, with result D, belongs to a member of the Percy Grey family which descends from Thomas Warburton (1810-93) who was born at Culcheth, near Warrington.

- b. One result (E) is from a descendant of John Warburton (1809-86) who was born in Holywell, Flintshire. It shares a mutation with result C. Norman Warburton notes that one Warburton family is known to have settled in Flintshire in 1408, but it is possible this branch moved there more recently.

- c. A result (G) from a member of the Warrington (Stanley) clan which descends from John Warburton of Warrington (circa 1754-1821) shares the same mutation as C and E. John's details and origins are not certain but he was a flax dresser who lived in Warrington. Therefore the owners of results C, E, and G probably share a relatively more recent common ancestor, as well as an earlier common ancestor with D and F.

The Dutton - Warburton Group

In February 2013 I discovered that the Cheshire group closely match a group of 5 Duttons who are included in the Dutton DNA Project on Family Tree DNA. The historical connection between the Warburtons and the Duttons is that the earliest known Warburton family were previously Duttons descended from Odard de Dutton, a Norman knight. Therefore there is a good chance that this Warburton-Dutton match reflects this common ancestry and our shared results reveal the DNA of Odard himself, and his ancestors.

Mike Dutton of the Dutton group, and I have since taken a number of DNA tests to confirm and refine this link. Although we have extended our STR test results to

111 markers, our greatest focus has been on SNP (Single Nucleotide Polymorphism) tests. Mutations of single DNA bases are much more rare than changes in copy repeats in the STR test. Any given mutation probably only occurred once, and it is unlikely to be reversed. This makes them much more stable so they give more definite results. However most known mutations occurred thousands of years ago so they have little relevance in the normal timeframe for genealogical study.

Earlier SNP tests only tested bases where mutations were known to have occurred, and to be shared by significant numbers of people. Recently Mike and I took a new test with Family Tree DNA called Big-Y which tests a large proportion of the Y-chromosome looking for new mutations. It has uncovered more recent mutations including ones that are unique to me, or to Mike, and ones that are shared only by the two of us.

The Kings Cluster

The Kings Cluster was identified as a major grouping within U106 on the basis of STR results, including 67 and 111 marker tests. There are certain markers where specific, less common results are identifiers for the Kings Cluster. However it was then discovered that a SNP mutation, DF98 was virtually synonymous with this definition, and so it has become the definition of the Kings Cluster. The Kings Cluster is maintained by Iain McDonald who has built an impressive phylogenetic tree and distribution map that can be seen in The Kings Cluster Tree, and The Kings Cluster Geography on the Warburton Website.

There are probably about half a million men in the world descended from the common DF98 ancestor. They include several important people of note: a Norman knight (our own ancestor Odard de Dutton), some minor Belgian aristocracy, and half the royal families in Europe. For this reason the group defined by DF98 is called The Kings Cluster.

The House of Wettin have sat on the thrones of Britain, Belgium, Bulgaria, Portugal and Saxony. Queen Elizabeth II will probably be the last Wettin royal to sit on the throne of the United Kingdom, meaning only Belgium will have an incumbent Wettin. Our last link with these royal families is around 4200 years ago (calculated as 2268 BC with a 95% confidence level between 3264 BC - 1704 BC), so the Queen is probably about our 120th cousin.

Cheshire Group DNA Calculations

I carried out a series of calculations using the Warburton and Dutton STR results to calculate when our common ancestor lived. I also carried out similar calculations on each pair of Cheshire group members. The results are contained in documents on the Warburton Website.

Warburton-Dutton DNA Results shows the actual DNA results, and identifies those markers which are significant identifiers of the group.

The 10 Warburton and 5 Dutton results available at the time produced 50 Warburton-Dutton pairs who share a common ancestor. Warburton-Dutton DNA Calculations is a document which shows the results of Time to Most

The Button Files

Recent Common Ancestor calculations for each pair, and produces a weighted average date from the 26 pairs where at least 37 markers could be compared. This produced an average date of 1109AD, with a 68% (1 standard deviation) probability that he lived between 786AD and 1529AD. This compares with the historical evidence that he would have been born between 1040 and 1200. Details of the criteria used in the calculations are included in the document.

There are 45 unique pairs of Cheshire group members of which 32 pairs are unbounded by genealogical knowledge. Cheshire Group DNA Calculations is a document which shows my detailed results, as well as details of the criteria used in the calculations.

The mode (or modal result) is the most common result from the group for each marker. It probably represents what the result from our most recent common ancestor would have been. It is estimated that in any given result the most likely number of differences from the mode (i.e. mutations since the first Warburton lived) is 2, with reasonable probabilities for any number from 0 to 5. The Cheshire group members have between 0 and 4 mutations.

The average date for the most recent common ancestor of the 32 unbounded pairs is 1177AD with a probable range (within 1 standard deviation) of 837AD to 1643AD.

Alternative Explanations for the Warburton Dutton Match

Whilst the most likely explanation for the Warburton-Dutton match is descent from Odard de Dutton there are two other possibilities. Firstly there may have been a non-paternal event resulting from a liaison between a Warburton and a Dutton. This could be either an illegitimate birth, or the adoption of a widow's children, resulting in a child taking his mother's, or step-father's name rather than his natural father's name. Such a liaison is entirely possible as both names originate from Cheshire villages and spread over a similar area. There are several recorded Warburton-Dutton marriages. However such a liaison could not occur before around 1300AD and would probably be much later. It is also possible that the natural father was indeed descended from Odard de Dutton.

The second possibility is that two descendants of an earlier common ancestor coincidentally adopted Warburton and Dutton as their surnames. Such a common ancestor could have lived as late as the 14th century when most non-aristocratic surnames were adopted in England. However he could have lived much earlier, probably before the two villages were founded. It is known that Warburton was founded around 915AD as a fortified settlement guarding a ford in the river Mersey, which was the northern border of the Saxon Kingdom of Mercia. The earliest evidence of Dutton is a reference in the Domesday book, and it's name structure suggests it was also founded as a fortified settlement on Mercia's northern border.

Calculations on when the common ancestor lived, whether based on STR results, or SNP results, are consistent him being Odard, or one of his immediate descendants. However they leave little scope for him

having lived later. Therefore a later non-paternal event is less likely, but the possibility of an earlier local, probably Saxon ancestor remains credible, particularly as the vast majority of U106 people in the UK are of Saxon descent.

The Big Y Test and Results

Big Y is the name of a new Y-chromosome test that was introduced by Family Tree DNA in late 2013. To explain its importance I will begin with a quick review of Y-chromosome tests.

There are two types of Y-chromosome test, the Short Tandem Repeat (STR) test, and the Single Nucleotide Polymorphism (SNP) test. The STR test looks at areas of the Y-chromosome where strings of DNA are repeated a number of times. From time to time the number of repeats will change. The Warburton DNA project uses the YDNA-37 test which is an STR test that looks at the number of repeats at 37 specific locations. There are tests that look at other numbers of locations, from 12 to 111.

SNP tests look at individual DNA bases where the value (represented by a particular molecule) has changed, or mutated. Such changes are rare, perhaps occurring just once in human history on any particular base. The population can therefore be divided into those who have the change and those who don't.

STR mutations occur much more frequently so are useful for looking at the last 1000 years, but they can also occur in either direction, so mutations can cancel out. This leads to the possibility of random matches so other factors, such as a shared surname, are needed to confirm a match.

Big Y is an SNP test. It differs from previous SNP tests in that it 'discovers' many new SNPs. Previous SNP tests just looked at specific locations where mutations are known to have occurred. I previously took the Geno 2.0 test from National Geographic and this tested me for many known SNPs, and identified Z306 as the most recent SNP I am positive for.

Big Y has identified a large number of more recent SNPs, including several that are shared only by Warburtons and Duttons, and six that are unique to me, but are probably shared with some or all of the Cheshire Group. The results are also improving our knowledge of the structure of the Kings Cluster, identifying our closest cousins within the cluster, and helping to date when the various mutations occurred.

Family Tree DNA have tests for many, but not all individual SNPs. It is hoped that in time tests will be made available for these more recent SNPs, enabling members to test specific SNPs without having to take the full Big Y test.

If you know your SNPs, or mutations you will have a better understanding of the history of your male line. The mutations occurred in sequence, and the sequence can be determined by the number of people with that mutation. The older mutations are used to divide the population into haplogroups. For example most people in western Europe belong to haplogroup R which is defined by a mutation called M207.

The Button Files

About 8000 years ago, our ancestors had just entered Eastern Europe, and in one of them a mutation occurred called M269. In the past all those members of the Warburton DNA project who were haplogroup R were described as R1b1a2, and this is synonymous with M269. The descendants of R1b1a2 now represent most of Western Europe!

M269 is a static name defining the mutation; R1b1a2 is a dynamic name that shows its placement in the human male-line family tree. Hence R1b1a2 is descended from R1b1a, from R1b1, from R1b, from R1, from R. FTDNA provides a results page for projects such as the Warburton DNA project. Here FTDNA defines people by their most recent mutation rather than their dynamic male-line designation.

The Cheshire group is defined by a series of mutations that follow on from M269 or R1b1a2.

The next mutation we are concerned with is L11. This probably happened a little over 5000 years ago, somewhere in the heart of Eastern Europe, probably in the Danube valley. We missed an important mutation, P312 which dominates Western Europe, particularly in the Celtic populations on the sea coasts of Western Europe.

Our branch stayed somewhere in the upper Danube, and around 5000 years ago (calculated as 2991 BC with a 95% confidence level between 3778 BC - 2345 BC) a man was born, probably somewhere in the region of Vienna or Budapest, who had a new mutation, U106. His descendants represent about an eighth of Europe today. U106 is an important mutation because it defines the scope of an FTDNA haplogroup project where much relevant research is done.our research. Anyone who has the U106 mutation is entitled to join this project at:

<http://www.familytreedna.com/public/u106/default.aspx?section=ycolored>

and subscribe to its message board here:

https://groups.yahoo.com/neo/groups/R1b1c_U106-S21/conversations/messages?o=1.

Within U106, the Cheshire Group belongs to a minor branch defined by a series of mutations Z381, Z156 and Z306. Mutation Z306 occurred around 4300 years ago (calculated as 2155 BC BC with a 95% confidence level between 2923 BC - 1591 BC). The founder of Z306 probably lived somewhere in western Europe in the Rhine valley, his family having migrated westwards over the previous 700 years. We suspect he was a member of the Bell-Beaker culture.

Beyond Z306 most research takes place within the U106 project. One specific area of research is defined by the next relevant mutation, DF98. This was found a couple of years ago and occurred shortly after Z306. There are about 300 families who should have the DF98 mutation and have tested at Family Tree DNA.

From here, we are dependent on the results of the BigY tests, which have only begun to appear in the last few months. One mutation that defines a small corner of the Kings Cluster is S1911 which probably occurred around 2100 BC (calculated as 2113 BC with a 95% confidence level between 3247 BC - 1566 BC).

The Big Y test found a number of mutations that are more recent than S1911. These include 27 mutations which are shared by myself and Mike Dutton, 6 that are unique to me, and 11 that are unique to Mike.

Based on the numbers of these unique, and narrowly shared mutations it has been calculated that mutations occur every 118 to 169 years (95% confidence). The 27 shared mutation must have occurred after S1911 (2100BC) and before the common Warburton-Dutton ancestor (no later than 1200AD) so we have 27 mutations in 3,300 years, or 122 years per mutation. Thereafter Mike has had 11 mutations in 750-900 years (68-82 years each) and I have had 6 (125-150 years each).

This shows that the frequency of mutations can be quite volatile, but more importantly it suggests that the Warburton-Dutton line must have split from the rest of S1911 very soon after 2100BC. If Odard is indeed our ancestor then at some point it must have migrated to Normandy. When people are to be found who share just some of our 27 shared mutations they will help to fill in that 3,300 year gap and maybe confirm the migration to Normandy.

The Future

Status

When I embarked upon the Warburton DNA project about 8 years ago I wanted to see if I could prove that all modern Warburtons were descended from the original family that changed its name from Dutton, as this was the assumption made by Norman Warburton's book **Warburton: The Village and the Family**. I also wanted to provide a way for people to enhance their genealogical research by identifying links where traditional genealogical information is no longer available.

My project focusses on the Y-chromosome and the paternal line, and ignores other areas where DNA might help, such as using mitochondria to explore the maternal line, and autosomal DNA to identify cousins from across all lines of descent. It can be argued that the paternal line is just one of many lines of descent, but it is unique for two reasons. Firstly, in many societies at least, it mirrors the inheritance of family names, though this is not always true. Secondly the y-chromosome is a piece of DNA which has been passed almost unchanged for thousands of years. Together with mitochondria it is a genuine relic of your distant ancestors.

It is exciting to think we now have considerable evidence that somewhere between a quarter and one third of modern Warburtons belong to the Cheshire group, and are indeed descended from that original Warburton family. Sometimes a name is inherited from the mother so a further proportion will have inherited their name from the original family, but not their y-chromosome.

This leaves a large number of Warburtons who are not descended from the original family. There are simply too many Warburtons in the world today for that to be the case. They owe their name to the village of Warburton, but not the family. When surnames were first being

The Button Files

adopted many sons of the village will have taken the village name.

Not all such adopters will be the ancestor of a large modern clan. Many lines will have died out, and others may remain small. However there is an emerging group based around the area of Lancashire north of Bury which could amount to 10-20% of modern Warburton, and who have the genetic variability for their common ancestor to have lived at that time.

The Future

The future of the Warburton DNA project can be considered from two viewpoints. The first is obviously mine. I have already described how future Big-Y results may show how and when the ancestors of the Cheshire group migrated to Normandy. I've also discussed how I might improve the Cheshire groups's phylogenetic tree by basing it on SNP test results rather than STR test results. The first of these requires patience as I can only await results from elsewhere. The second requires both money and patience to get more Big-Y tests from the Cheshire group, and to await the development of tests for specific Warburton mutations.

I am also keen to continue building the overall Warburton picture. In particular I want to be able to associate DNA results with each clan I develop, and vice versa.

The second viewpoint is that of the rest of the Warburton population. Whilst I'm sure many of you are interested in my big picture, I recognise your main priority will be to fit yourself into that picture. Also you may feel the cost of even a discounted Y-37 test is more than you wish to pay.

The growing story of the Cheshire group is adding considerably to my knowledge of my ancestry and I hope that is true of those of you who also belong to that group. I am also sure there is a similar story out there for the rest of you, if you can find it. For example Richard, whose recent Y-37 test result was unmatched amongst Warburtons has found matches with the Stewarts, who were High Stewards of Scotland. He was accepted into the Stewart project at FTDNA and is able to follow that story as it develops.

I will consider future options for the various different groups of Warburtons.

The Cheshire Group

Currently the Cheshire group is in a 'wait and see' mode. We are waiting to see if results emerge which share some of the 27 mutations that Mike Dutton and I share. Only then can we begin to fill in some of the 3,300 year gap between the emergence of mutation S1901 and the birth of the common ancestor of Mike and myself. There are two possible scenarios at play here. Either the Cheshire group belong to a branch of S1911 with relatively few descendants who have survived until today, or they belong to a branch where most people are in a region that is poorly tested (e.g. France). Ultimately it may be possible to determine how our profile travelled from the Rhine valley to Cheshire, and whether this indeed included a detour via Normandy to be brought over by Odard de Dutton.

It may also be possible to study mutations since the Warburtons split from the Duttons to determine a better phylogenetic tree than the one I have constructed based on STR mutations. One way to do this would be to get 3 or 4 more Big Y results from within the Cheshire group to and compare our post-Dutton mutations. I have 6 and the others would have a similar number, maybe even as many as Mike's 11. Some will still be unique but others will be shared between 2, 3, or all of us. This will give some sequence to the mutations and allow a tree to be constructed that would be more robust than the current one. The benefit of producing such a tree is that an individual could then find their position in the tree by testing a few specific mutations.

As yet however most of the newly found mutations are defined just by their location and are only just beginning to be named. Specific tests for these locations also need to be defined. One mutation from the 27 shared mutations has been named CTS5105 so a test may be possible in the future.

Finally there will be Warburtons who are looking for an inexpensive test to see if they belong to the Cheshire, or any other group. There is a paper called **A Strategy for DNA** on my **DNA Page** which includes a section on Cost Saving Strategies. Here I proposed using the cheapest STR test, the Y-12 test at \$59. The most frequent Cheshire group result for each of these 12 markers matches a pattern called the **Western Atlantic Modal Haplotype**. If you matched this, or had just one difference, then you are likely to belong to the Cheshire group. A SNP test for mutation DF98 (\$39) would confirm this.

The Lancashire Group

The results for the Lancashire group on FTDNA show the predicted most recent SNP mutation for the 5 members. Three of these are U106, and one is the much lower level Z343. It would seem they also share the U106 story but the details differ significantly from those of the Cheshire group.

At least one member of the Lancashire clan should join the U106 project. Z343 falls under mutation Z9 which is an organising level within the U106 project. By monitoring developments and discussions concerning Z9 and its components they can share in the story as it unfolds. Ultimately I'm sure someone from the group would be encouraged to take the Big-Y test to position the group as accurately as possible within the Z343 structure.

In the short term it would be useful for one of the three Lancashire group members who have already tested with FTDNA, and should therefore have a sample on file, to order a Z343 SNP test which would cost \$39. Should this result prove positive it will confirm the groups position within Z343.

Also Z343 would become a defining mutation for the Lancashire group, so anyone wishing to test if they belong to a group could take the Y-12 test, and if their result is similar to the current Lancashire members, then a Z343 SNP test would be likely to confirm their membership.

The Garryhinch Clan

The Button Files

There is one other distinct Warburton group and this is the Garryhinch clan. The Garryhinch clan represent an alternative candidate for the carriers of Odard's y-chromosome. The family story is that they are related Odard's descendants at Arley Hall in Cheshire. At this time I feel the evidence for the Cheshire group is stronger, which means the garryhinch link is probably via an illegitimate, or adopted son who went to Ireland to make his fortune. Of course it is possible future evidence will tilt the balance.

The Garryhinch clan belong to haplogroup J and FTDNA predicts their latest known SNP mutation as L25. J-L25 comes under J-L24 which also has a project devoted to it at FTDNA. Again at least one member of the clan should join to monitor the ongoing story. Eupedia.com describes J2 as follows:

Haplogroup J2 is thought to have appeared somewhere in the Middle East towards the end of the last glaciation, between 15,000 and 22,000 years ago. Its present geographic distribution argues in favour of a Neolithic expansion from the Fertile Crescent. This expansion probably correlated with the diffusion of the domestication of cattle and goats (starting c. 8000-9000 BCE) from the Zagros mountains and northern Mesopotamia, rather than with the development of cereal agriculture in the Levant (which appears to be linked rather to haplogroups G2 and E1b1b). A second expansion of J2 could have occurred with the advent of metallurgy, notably copper working (from the Lower Danube valley, central Anatolia and northern Mesopotamia), and the rise of some of the oldest civilisations.

J2a1-L24 is the most widespread subclade of J2a, with a distribution ranging from the Middle East to Europe, North Africa and South Asia:

- *J2a1-M158 has been found in Anatolia, Iberia, Pakistan and India.*
- *J2a1-L84 is a minor subclade detected in the Balkans.*
- *J2a1-L25 is the main branch of L24 and is subdivided in many subclades.*
 - *J2a1-F3133 is found in Anatolia, Syria, Iran, Central Asia and Saudi Arabia.*
 - *J2a1-F761 is the Western European subclade of F3133, found in Italy, France, the Benelux and England.*
 - *J2a1-L192.2 is found in Anatolia, North Africa, Iran and Kerala (India).*
 - *J2a1-PF4888 is found in the Middle East and among Ashkenazi Jews (F659 subclade: Katz and Cohen).*
 - *J2a1-Z387 and its main subclade L70 (DYS445≤7) are found throughout continental Europe as well as in the Middle East at lower frequency.*

It would seem that F761, or possibly Z387, are the likely most recent mutations so a test for these, if available, would be useful. As far as new members testing to see if they might be members, a Y-12 test that matches and gives a predicted J2 haplotype would be sufficient in itself. However since the Garryhinch clan

originated in the 17th century, any living member of the clan should be able to link themselves using standard genealogical research. Also a match from a Warburton who is not part of the clan would disprove the illegitimate son theory and increase the possibility they are indeed descended from Odard.

Other Warburtons

There remains a group of Warburtons who have results that don't match any of the above groups. Also there will be future Y-37 or Y-12 results that don't match them, though they might match a hitherto unmatched result. The next step for a Y-12 result that shows the possibility of such a match will need to be determined based on circumstances.

The current unmatched results include a few from haplogroup I, and one from haplogroup G, but most are haplogroup R-M269 or below. M269 is a fairly old and widely inherited mutation so it would be helpful to identify a more recent mutation. Strategies for doing this will depend on circumstances and I am always happy to advise.

If you are one of those who has already tested but is still unmatched you may have to seek matches outside the Warburton clans, especially if you know your name was not always passed down the male line. I recounted the story of Richard and his links to the High Stewards of Scotland, and there is no telling where other stories might lead.

However it still may be worth trying to identify how large is the Warburton clan who share your result. If you have a significant Warburton family tree it would be useful to find and test the most distant male Warburton cousin you can find. This will either prove your clan share the same y-chromosome, or if you don't it might show you are linked to one of the larger groups, but not via an entirely male line.

Next Issue

This issue was much later than envisaged, partly because I got busy with other things, and partly for the want of interesting articles. I now have the ability to post new developments on the new website which reduces some of the need for a newsletter.

However I believe the newsletter is a useful format so I will produce a further issue when sufficient material is available.

There must be historical Warburtons worthy of an article. I have previously suggested the monetarist Clark Warburton and the Premier of Prince Edward Island Alexander Bannerman Warburton, but these would require research.

I am always willing to receive submissions so if you can think of an interesting topic please don't hesitate to have a go.

As usual my plans are fluid but I will try and produce something next year.