Ewing Surname Y-DNA Project – Article 10

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This is the tenth in a series of articles about the Ewing Surname Y-DNA Project. The previous nine articles have appeared in previous issues of the *Journal of Clan Ewing*. They are available on-line through links at *Clan Ewing*'s web site, *www.clanewing.org*. Extensively cross-linked results tables, project participant lineages, group relationship diagrams and network diagrams are also available on the web site.

Feedback Received

Readers of these Y-DNA articles in the *Journal* have been too shy, too polite or too bored to offer much in the way of suggestions or criticism. But I recently had a visit from an old friend, who was none of these. He is a working scientist, who has a fair amount of practice in explaining complicated studies to folks who don't have the background or experience he does. I excitedly told him about the project and showed him my slides from the presentations I gave at the gathering in Ft. Wayne. He had little trouble understanding the project and he asked good questions. When I asked him what he thought, he scratched his chin, looked at me over the top of his glasses, and said, "David, you have a nice new car and these folks would like to take a ride. Why do you spend so much time with the hood up, trying to explain how the engine works?"

What can I say? It's a really cool engine. But his point is well taken. Let's take a ride.

See how this puppy handles on the curves in Group 5!

Group 5 presently consists of eleven men who share a distinctive DNA marker.¹ Four of them have conventional genealogy connecting them with "I believe his name was William," who is discussed at the beginning of Fife's Chapter 24³ and is thought to be the father of seven sons, each of whom has his own chapter in Fife. In addition to the marker that defines Group 5, these four have another distinctive marker. In the last Y-DNA article, I mistakenly said that one of these four (JW) did not know his connection with William? and based on his DNA pattern, I suggested he look for it. It turns out that he does know his connection, demonstrating simultaneously that I am a sorry record keeper and that this DNA stuff does really work!

¹ DYS 391 = 10

² I hate calling this guy "I believe his name was William" – or even the shortened form, "William?" – but I started doing this because of what Fife says about him, and I seem to be stuck with it.

³ Fife, Margaret Ewing, *Ewing in Early America*, 2nd edition edited by James R. McMichael, 2003, and published for *Clan Ewing in America* by Family History Publishers, Bountiful, Utah. The text of this book is available online in the Ewing Reading Room on the *Clan Ewing* web site (*www.ClanEwing.org*). But the images of primary source documents included in the print edition are not yet posted. The book is also available in hardback or paperback from the Higginson Book Co. (*www.higginsonbooks.com*).

⁴ In order of their birth dates, his sons were: Nathaniel, Fife's Chapter 24; John, Fife's Chapter 31; William, Fife's Chapter 27; Joshua, Fife's Chapter 25; Samuel, Fife's Chapter 26; James, Fife's Chapter 28 and George, Fife's Chapter 29.

⁵ CDYa = 35

Now we have three more men that have joined the project and have conventional genealogical evidence of a connection with William?

- JD tells us he is able to document his lineage to his second great grandfather, James D. Ewing (1773-1850) m. Mary McCleary. This man appears in Fife's Chapter 26, at the top of page 220. If we then follow Fife, we conclude that JD's fifth great grandfather is Samuel Ewing (1705-1758), the fifth son of William?. Pretty fancy footwork we've used Fife to effortlessly add four generations to JD's lineage. The problem is that it just can't be so. JD has a DNA pattern so completely unlike any of the other men in this group that their most recent common male ancestor must have lived long before the last Ice Age. So, either JD is mistaken about his connection with James D. Ewing, or Fife is mistaken about the connection between James D. Ewing and the Samuel of her Chapter 26. Maybe these are just two different James D. Ewings. We have put JD into Group 2 (Singletons). Interestingly, he matches on all 12 of the markers for which our only Ewan participant was tested a provocative finding and a good lead. We are waiting for Ewan to supply his lineage or order more markers.
- Paul Tyler Ewing, Jr. (PT) and Robert Lee Ewing (RL2) are new project participants, who believe themselves to be descended from William? through his second wife's first son, John Ewing (1695-1751),⁷ the subject of Fife's Chapter 31. PT believes himself to be descended from John's son, James Ewing (1732-1796) m. Anastasia Councell; RL2 believes himself to be descended from John's son, John Ewing [Jr.] (1730-1804) m. Mary Pratt. PT and RL2 did not know one another before joining the Ewing Surname Y-DNA Project, but if their lineages are correct, they are sixth cousins.
- Interestingly, though these two men are reasonably close Y-DNA matches for one another, they are at considerable distance from the other men in Group 5.8 Indeed, they are at considerable distance from all of the men in the "large, closely related group of Ewings." This suggests that they are in fact related to one another, perhaps both descended from a common sixth great grandfather, John Ewing, but that this man is not genetically related to William?. Perhaps Fife was mistaken that the John Ewing of her Chapter 31 was the son of William?. Perhaps Fife was right, but PT and RL2 are descended from a different John Ewing. Or perhaps William? married his second wife after she already had given birth to John, who had been fathered by a different man, and William? adopted him. That could explain the discrepancy in the age given for John Ewing as "about 55" in a deposition taken in Queen Annes County, Maryland, in 1745 (so born circa 1690), which Fife discounted (Fife, Chapter 24, pg. 188) because she believed him to be a younger half-brother to Nathaniel (1693-1748). the son of William? and his first wife. But John could have been born to William?'s second wife and a previous husband in 1690, and then subsequently adopted by William?. This is just speculation on my part, but it certainly provides the incentive for reconsideration of some of the documentary evidence we have. I am hopeful that PT and RL2 will come up with an explanation and report back to us.

⁶ Or of Samuel with "I believe his name was William" in Fife's Chapter 24.

⁷ PT shows a middle initial, "E," for this John Ewing. I do not know his source for this, but Fife doesn't use it.

⁸ The first Network Diagram later in this article does not show RL2 because we received his results after it had already been prepared. If he were in the diagram, he would be very close to PT at genetic distance 2 on the 15 markers considered there, though he differs by genetic distance 4 on the 37-marker panel.

Some excitement in Group 9

Two men thought to be descended from William Ewing of Rockingham County, Virginia, became the first two members of Group 9. Their DNA profiles are strikingly different from the other men in the project, but quite similar to one another. As we reported in Article 7, William Myrl Ewing (WM), the first man in this Group to get his results, had traced his conventional genealogy back to William of Rockingham, whom he thought could be his fifth great grandfather. When his results showed convincingly that he could not be genetically related to the other Ewings in the project, he was sure that this confirmed a suspicion he had that his third great grandfather had been adopted. Then we got results on Homer Norton Ewin, Jr. (HN), whose fifth great grandfather was also William of Rockingham, and his results matched WM's closely! There was no adoption after all; testing confirmed that these two men are very likely to be biological fifth cousins.

Now, we have just received results on a third man in this group, Vernon Charles Ewin (VC), whose daughter, Linda Ewin Ziemann, has pretty good conventional genealogic evidence back to William Ewing (1825-1888) m. Frances Stratton, but she wasn't at all sure whether he was in fact the son of William Ewing (c.1794-1849), a great grandson of William Ewing of Rockingham, who is also the second great grandfather of HN. The fact that VC matches the other men in this group closely and is so different from all other known Ewing men essentially confirms Linda's hunch that she is in fact descended from William of Rockingham, and will allow her to focus her efforts on looking for documentary proof with a considerable degree of confidence that she is on the right track. It has also introduced her to her cousin, Gail Ewin Fairfield, who joined the project by persuading her brother HN to submit some DNA. Relatives found!

Where Are We Now?

The statement of purpose of the Ewing Surname Y-DNA Project begins:

The purpose of the Ewing Surname Y-DNA Project is to identify unique genetic profiles for different branches of the Ewing family. Eventually, interested genealogists will be able to find their branch of the family with a simple DNA test. Analysis of Y-DNA samples from men who have well-documented conventional genealogies will allow us to solve some thorny old genealogical puzzles about what the relationship may have been between the different Ewing lines in early America.

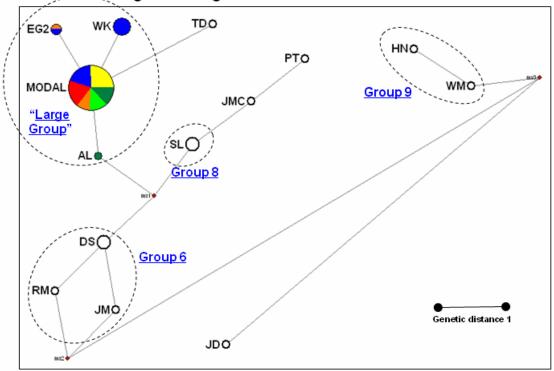
We are making some progress on this. So far, we have identified four completely distinct, unrelated branches of the Ewing family. In the Results Pages on the web site, these appear as Groups 6, 8, 9 and what I have been calling "the large group of closely related Ewings," which includes the individuals in Groups 1, 3, 4, 5 and 7. If you want to see why we think these are distinct groups, but you don't want to

⁹ As an interesting side note, HN was also SNP tested and found to be in Haplogroup I, which is a reasonably common result for men of British extraction, but suggests deep origins in northern Germanic tribes rather than among Celtic Britons. As a matter of course, Family Tree DNA (FtDNA) "predicts" the haplogroup of anyone who tests with them (based on their STR haplotype), but they will do confirmatory SNP testing at no charge if the haplogroup can't predicted with some confidence. FtDNA predicted WM and VC to be in Haplogroup G2, which is a rather unusual haplogroup in Britain. But this cannot be so, because their haplotypes are quite close to that of HN, and they are known to be related to him on conventional grounds, so they must be in the same haplogroup. At my request, confirmatory SNP testing is pending on both of them, but there is no doubt of the outcome – they will also turn out to be in Haplogroup I.

get grease on your hands fooling around under the hood, just have a look at the following network diagram.

I'm itching to explain it to you in detail, but I'm going to take my friend's advice and restrain my enthusiasm. Each of the four clusters is encircled with a dotted line. All you really need to know is that the length of the line between any two nodes in the diagram is proportional to the genetic distance between them. In addition, the larger nodes represent more than one individual. For example, the node DS in Group 6 in this diagram represents three men, DS, DH and WE2, who are genetically identical at all 15 markers considered.

Network Diagram using 15 markers with mutation rates < .002



Look at the men that don't fall into any of the clusters, TD, JD, PT and JMC – they are "singletons," not related to the others in the project in a genealogic time frame, so we have created Group 2 for them, a sort of non-group to put all the singletons into. TD is the singleton most closely related to the large group of related Ewings (genetic distance 9 from the 37-marker modal, so we think too far to be considered part of that group, but only two of these differences¹⁰ occurred in the 15 markers we considered in preparing this network diagram, so in this diagram he is genetic distance two from the

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¹⁰ DYS 455 = 10 and DYS 394 = 14

modal group). JD is the farthest from the closely related group; don't be deceived by the fact that JD appears to be fairly close to Group 6 – distance is measured only along the lines. Interestingly, the singleton MK is genetically identical at all 15 markers considered in this diagram to the two men in Group 8, so he has fallen into the SL node with them.¹¹

Now, I said in the last article that we could distinguish some sub-branches of the large group of related Ewings by their DNA, but that the men in this large group are so closely related that we can't reliably distinguish among the different immigrant lines. Have a look at the network diagram on the next page to see what I mean. To make what I'm talking about more obvious, I have continued to ignore some of the more rapidly mutating markers in preparing this diagram, but this time I have used 23 of the 37 markers for which we have data, so that we can distinguish the men in the large, closely related group a little better. I have also zoomed in on just the more closely related group. The notations on the lines connecting the nodes show the markers that distinguish the nodes joined by that line.

- In the first network diagram using 15-markers, on the previous page, the big pie labeled "Modal" contains 30 men who are genetically identical at those markers. When we increase the number of markers considered to 23, as we do in the network diagram appearing on the next page, the modal node now contains only 15 men, but it still includes men from four of the groups we have established based on conventional genealogy: Groups 1, 3, 4 and 7. This is why we can't distinguish these groups genetically. ¹³
- Most of the remaining men¹⁴ are at genetic distance one (remember, out of 23 markers) from the modal. In the diagram appearing on the next page, the markers at which nodes differ are written on the lines connecting them.
- The circle labeled "DG" at about 4:00 o'clock from the modal node in the diagram on the following page contains eight of the men in Group 5 again, they are genetically identical to one another with respect to the 23 markers we are considering, but are at genetic distance one from the men in the modal node, differing only at the marker that distinguishes this group. Somewhat disconcertingly, GR is also in this node, even though he has conventional genealogy connecting him with Group 3. EG and AL are the remaining two men in Group 5; they are both genetic distance one from the other men in this group, but at different markers.

¹¹ SL and ME are known third cousins of one another and differ at only one marker on the 37-marker profile. MK differs from them at 7 markers on the 37-marker profile, at a couple of them by more than one step, so we can't consider him related to them in a genealogical time frame. On the other hand, he is about the same distance from the R1bSTR47 Scots cluster as they are, so we should probably start including him in Group 8 if we are going to call it R1bSTR47 Scots

¹² The relationships shown among the singletons and more distantly related groups remain pretty much the same when we consider more than 15 markers, but the genetic distances get larger, and MK pops out of the SL node when 23 markers are considered.

 $^{^{13}}$ When all 37 markers are considered, the modal node still contains four men from three different groups -3, 4 and 7.

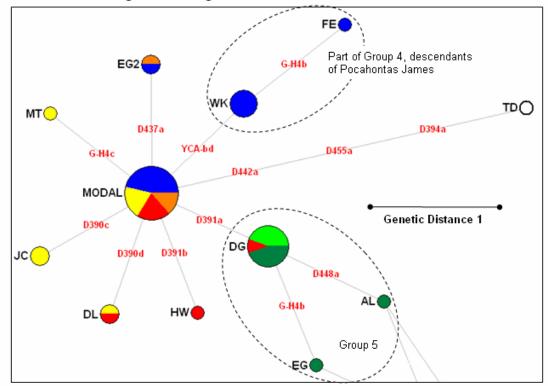
¹⁴ All except FE, EG and AL, who are at genetic distance two, and TD, who is at genetic distance three.

¹⁵ DYS 391 = 10

DYS 391 = 10

¹⁶ It is very important to remember that the significance of a given "genetic distance" depends on how many markers are being considered. When speaking about 37-marker panels, we usually just give the genetic distance as a whole number, assuming everyone knows we are talking about differences among 37 markers. When we are considering fewer markers, we should report both the genetic distance and the number of markers considered. Here, for example, we should say that there is one difference found in 23 markers considered, or genetic distance 1/23 for

Network Diagram using 23 markers with mutation rates < .004



The circle labeled WK at about 2:00 o'clock from the modal contains four men, genetically identical to one another, all differing from the men in the modal node at the same marker,¹⁷ and all descendants of "Pocahontas James" in Group 4. FE is the only other descendant of "Pocahontas James" in our project. He has the same marker that distinguishes the four men in

short. If we look at all 37 markers, we will find other differences. Indeed, the marker CDYa = 35, that all known descendants of William? so far tested have, is one of the quickly mutating markers that we are ignoring for the sake of this discussion. If we added just this marker to our diagram, another node would appear out of the node DG containing just these four men. The difference in shading in the node labeled DG shows that four of the men in that node are descended from William? but are not known to be descended from him, and one (GR) is thought to be descended from James of Inch and therefore to be in Group 3. (Network diagrams on the *Clan Ewing* web site are in full color and have keys identifying the groups, and such distinctions are a little easier to see there.) Either GR's conventional genealogy is mistaken or he has had a parallel mutation at DYS 391.

¹⁷ YCA-IIb = 22

- the WK node from the modal group, plus another one, ¹⁸ so he is at distance two from the modal group and one from the other four men in this sub-branch. ¹⁹
- Where in the diagram on the previous page are the other seven men in Group 4? Well, six of them are in the modal node, and EG2 is at genetic distance one from the modal and shares a node with one of the men in Group 7.

Where Shall We Go Next?

We want to find more markers that are specific for sub-branches of the family that we know about from conventional genealogy. Two things can help us do this. The first and most important is getting more participants to join the project, especially among men who have well worked-out conventional genealogies. We are making slow but steady progress on this goal. As of the date I am writing this (April 13, 2007), we have had ten new kits returned so far this year, four of them in March. We seem to be getting a new participant every week or two. At that rate we will make our goal of recruiting 100 Ewing project participants by the time of the gathering in 2008.

The second thing that can help us is that we may begin asking some of our existing participants to have more markers tested. We have not been pushing this too much yet, partly because of the expense, but mostly because we are not certain which additional markers would be the most helpful in differentiating the various Ewing lines. Extending a 37-marker panel to 67-markers costs only \$99 per participant. We hoped this would give us better resolution, but early results are not too promising. So far, we have results on the full 67-marker Family Tree DNA (FtDNA) panel for four project participants, DN (Group 3), GW (Group 4), JC (Group 1) and JMc (Group 2). DN, GW and JC are all in different branches of "the closely related group of Ewings," but they all have identical values at the 30 additional markers in a 67marker panel.²⁰ JMc differs from them at seven of these thirty markers.²¹ Sadly, the 67-marker panel won't help us distinguish Group 3 from Group 4, because we have already found identical 67-marker haplotypes in men from both of these groups. But since we have only 37-marker panels on the men in Groups 5 and 7, we don't know whether there may be a distinctive marker among the extra 30 markers we haven't looked at in these groups. Further, since we only have a very few men with 67-marker results so far, we don't know what we might learn from this panel about sub-branches in any of the groups- - even including 3 and 4. A couple more participants have ordered the 67-marker upgrade, and we will be interested to see their results, but for now, any of you who are considering doing this should have a conversation with me about it first – there may be better ways to spend your money.

What we need most are some additional fairly rapidly mutating markers that will help us get better resolution in the large closely related group. FtDNA offers at least another 30 markers for another

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 $^{^{18}}$ GATA H4 = 10

¹⁹ Interestingly, FE is descended from Indian John and the other four men from Swago Bill. Could GATA-H4 = 10 be a marker for the other descendants of Indian John? We will have to have more men from this line tested before speculating about that.

²⁰ For these three men, all thirty of the additional markers perfectly match the R1b1c7 ("Ui Neill") modal haplotype.

²¹ Remember that Group 2 is the "Singletons" Group – JMc is John McEwan. He is at quite a considerable genetic distance from the nearest Ewing and cannot be considered related in a genealogic time frame. His having more differences on the 67-marker panel really doesn't give us particularly useful additional information about the large group of closely related Ewings, but JM3, a new participant (James McCartney Ewing, who has an article in this issue of the Journal), is only at genetic distance 1 from John McEwan on the 12-marker panel, and he has ordered the upgrade to 67-markers because that could be very informative about their relationship to one another.

couple hundred bucks per participant, but these can also be ordered one at a time for prices ranging from \$6.20 to \$19.88 each. Other testing companies offer other panels and individual markers. As I recall, there are about 200 potentially useful Y-STR markers, but I don't know how many of these are commercially available. Plainly, we need to focus our efforts. Using the "shotgun" approach would be too expensive for this Scot; I'm thinking we should choose a few likely markers and just test these. Maybe I'll send an EMail to my old granddad, George W. Ewing, and see if he'll pay for a couple more markers on the chance he can get me out of his will.

What is Our Dream Trip?

The last sentence in the statement of purpose of the Ewing Surname Y-DNA Project is:

We will also be trying to collect samples from Ewing men in Ireland and Scotland, and this may allow us to identify the elusive homeland of the original Ewing immigrants to America.

We have already begun working on trying to understand how our DNA results may help us with this, and I plan to dedicate next issue's article to some discussion about it. I have also persuaded David Wilson, who is the group administrator of the FtDNA R1b1c7 haplogroup project, to write an article for the next issue outlining his research results so far and discussing what implications these have for the Ewing results. Any of you that have sponsored Ewing Surname Y-DNA Project participants who fall into "the large closely related group of Ewings" should add your results to the R1b1c7 project if you have not already done so, or EMail me and I will be happy to do it for you. There is no additional cost or other bother involved, and if David Wilson gets this information soon, he will be able to do a better analysis for us.

I would very much appreciate those of you who have good solid documentation of the specific locality where the Ewing ancestors of any project participant were living before immigration sending it to me (or sending it again, if you have previously sent it; I have only just now started trying to track this closely). I'm really trying to nail this down to the county level in as many cases as possible.

To Join or Get More Information

If you are ready to join the project, go to www.FamilyTreeDNA.com/public/ewing and click on "Join this group" at the top of the blue section on the left of the page. Participation by Ewing women is also welcome; they can get valuable genealogic information by persuading a male relative to submit a specimen. You can see results tables showing participant haplotypes on the Clan Ewing web site. There are also links on the Family Tree DNA web site to articles and FAQs. If you want to ask questions, call me at +1.505.764.8704 in the evening, or EMail me at DavidEwing93 at gmail dot com.

David Neal Ewing has been a member of Clan Ewing in America since 1996 and has served as its Chancellor since 2006. He previously served as the Chair of its Board of Directors from 2004-2006. He is also Group Administrator of the Ewing Surname Y-DNA Project, which he founded in 2004, and he is a regular contributor to the Journal of Clan Ewing. Dr. Ewing has a private practice in clinical geriatric neuropsychiatry in Albuquerque, New Mexico. He received his M.D. degree from the University of New Mexico and did his residency training at the University of Michigan Hospital in Ann Arbor, Michigan.