

Applying the New Cluster Tool on Ancestry.com To My Cousin Hal Oakley’s DNA Matches

By Burks Oakley II
12 July 2025

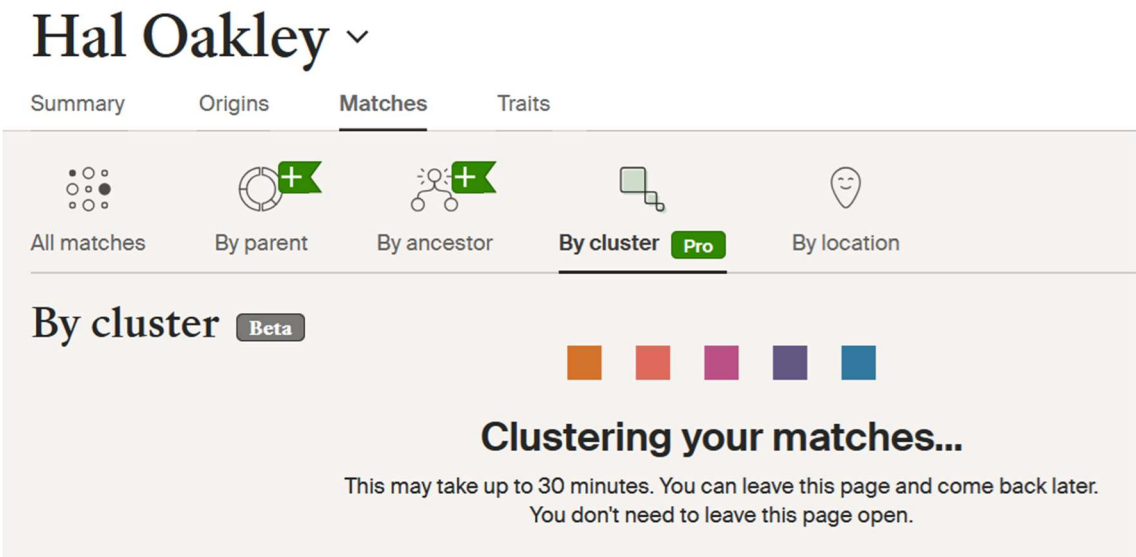
Within the past month, Ancestry.com released a new software tool called “Matches by Cluster”. This tool automates the “Leeds Method” that is commonly used by genetic genealogists. I just wrote a narrative about using the Cluster Tool to examine my DNA clusters. See:

http://www.burksoakley.com/QuincyOakleyGenealogy/ClusterTool_10Jul25.pdf

In the present narrative, I’ll describe how I used the Cluster Tool with my cousin Hal Oakley’s DNA matches. Hal’s father, Peter Anthony “Tony” Oakley (1933-2015), was my first-cousin. The three of us are all descended from Ray Miller Oakley (1876-1948) and his wife Kate Cameron Burks (1873-1954).

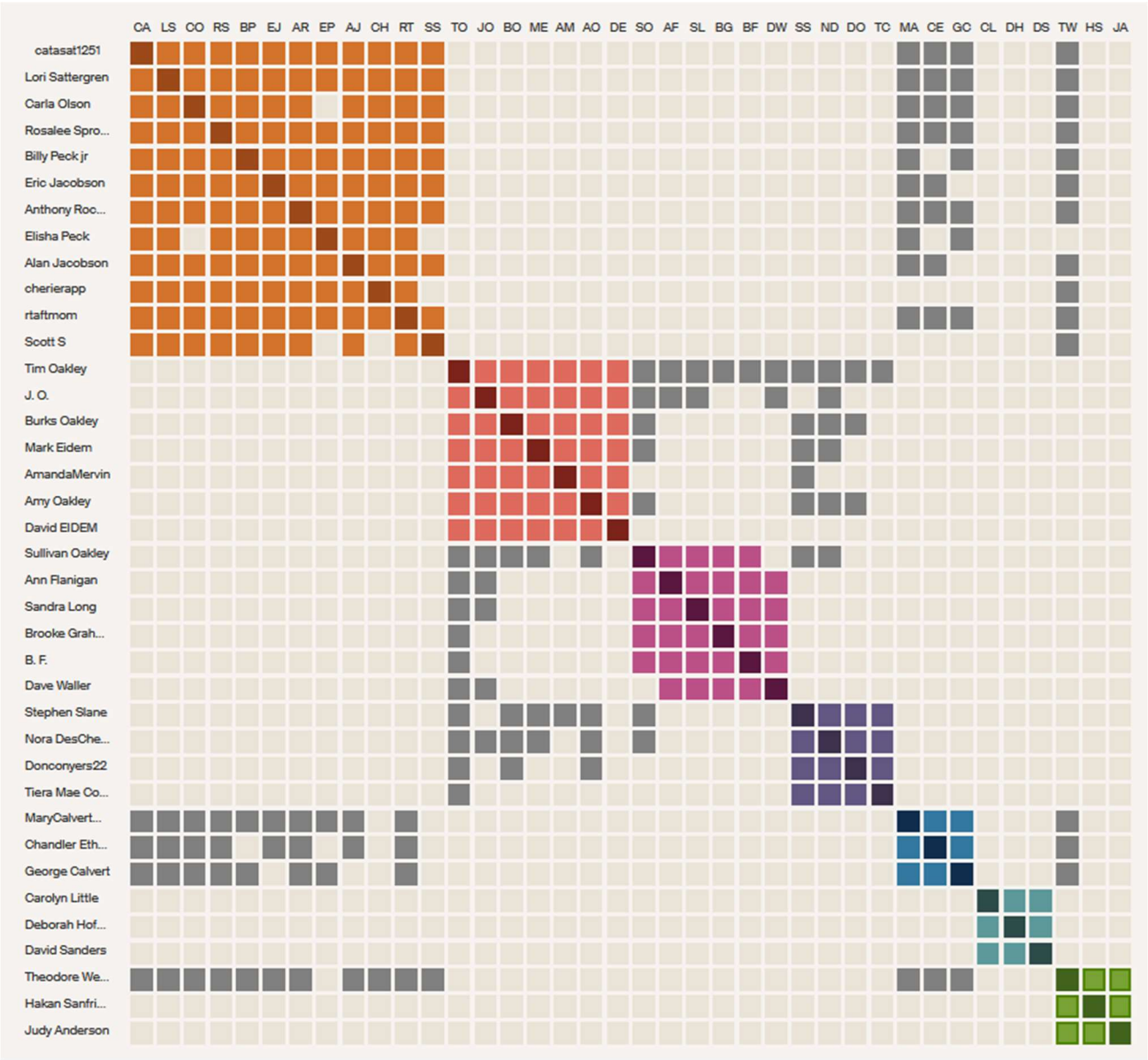
I’ll jump right in to an analysis of Hal’s clusters. If you haven’t already read the narrative about my DNA clusters, this might be a little difficult to understand. So I strongly suggest that you read that document before reading this one.

I first viewed Hal’s DNA matches on Ancestry.com – I could do this because Hal gave me permission to do so. I then clicked on the “By cluster” button – which brought up the following:



It actually takes some time to generate the clusters when a user first accesses this feature. But it typically takes no more than one minute. During this time, the five colored squares light up sequentially from left to right, to indicate that something is going on in the background. Note that the colors of the squares are the same colors that Ancestry uses for a person’s five largest clusters.

Here is a screenshot showing Hal’s clusters:



Hal has seven clusters, with a total of 38 DNA matches.¹ The clusters are color-coded:

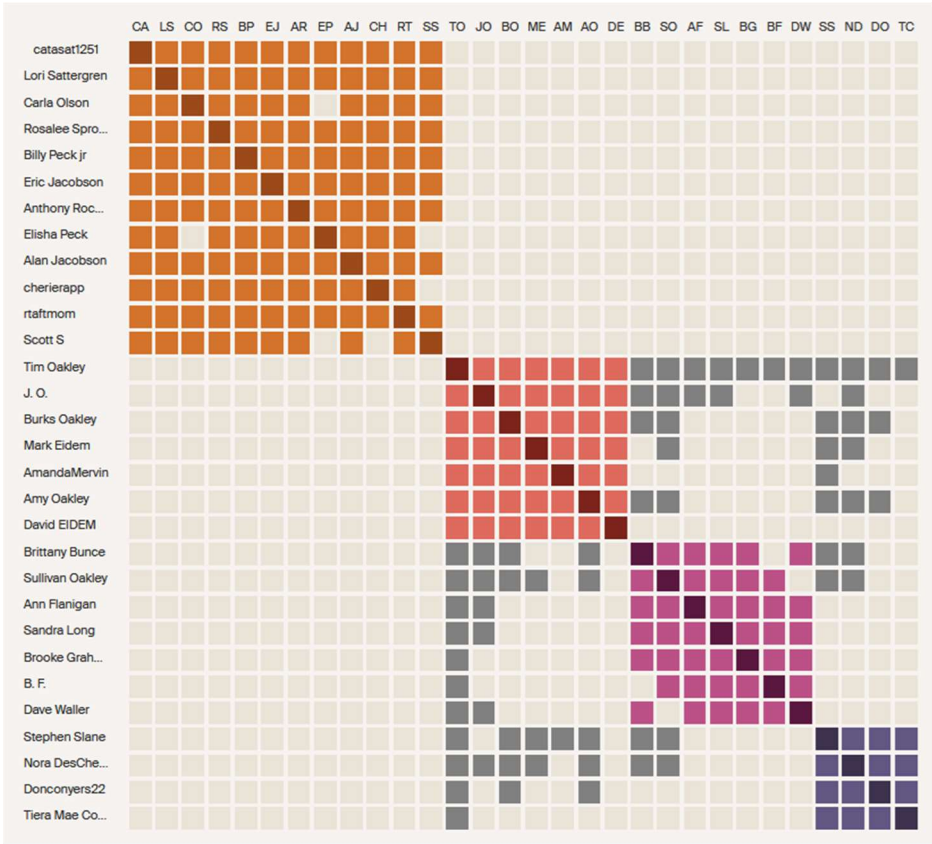
- burnt-orange (12 matches)
- coral (7 matches)
- magenta (6 matches)
- deep-purple (4 matches)
- blue (3 matches)
- turquoise (3 matches)
- green (3 matches)

Recall that to be listed on the overall cluster map, a person has to have a DNA match with Hal that is between 65 cM and 1300 cM.

Based on my knowledge of Hal’s family tree, I could tell that the coral, magenta, and deep-purple clusters were from Hal’s paternal line, while the burnt-orange, blue, turquoise, and green clusters were from Hal’s maternal line.

Here are Hal’s first four clusters:

¹ During the time I was writing this narrative, one more DNA match was added to the magenta cluster.



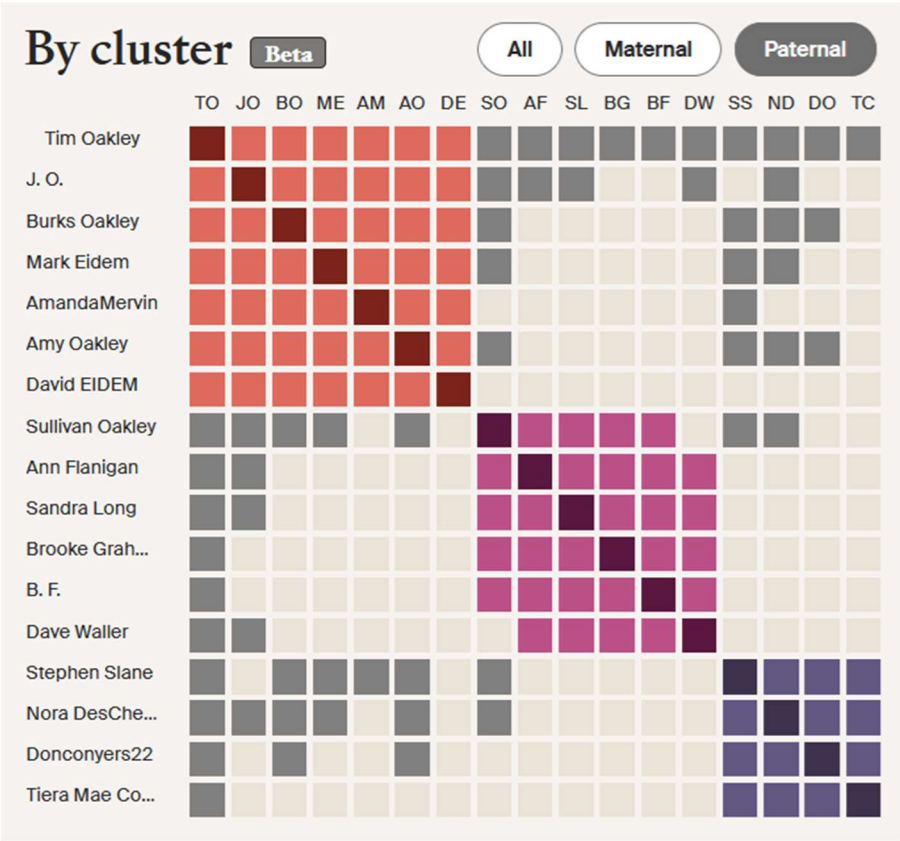
The burnt-orange cluster in the upper-left is a maternal cluster, while the other three clusters in the lower-right are paternal clusters. From a broad, high-level perspective (the view from 35,000 feet, so to speak), one striking observation is there are no gray cells in the upper-right and lower-left quadrants of this cluster map.

Recall that cells are shaded gray when the two people who intersect on that cell (row, column) are in different clusters, yet have a DNA match that is at least 20 cM in size.

The twelve individuals in the burnt-orange cluster are related to Hal on his mother’s side of his family. The eighteen individuals in the other three clusters are related to Hal on his father’s side of the family.

The fact that there aren’t any gray cells in the upper-right and lower-left quadrants (which are just mirror images of each other) means that Hal’s parents didn’t share any common ancestors within a short genealogical time frame (but I already knew this).

Now, let’s get on with it. I filtered Hal’s clusters so that I only viewed his paternal clusters:



Hal has three paternal clusters, designated by colors coral, magenta, and deep purple. I'll work through the three of them in order.

Hal's DNA matches in the coral cluster are all very well known to me. These people all are descended from Ray Miller Oakley (1876-1948) and his wife Kate Cameron Burks (1873-1954). This couple were the paternal grandparents of Hal's father, Peter Anthony "Tony" Oakley. Of course, they also were my paternal grandparents.

Since I am relatively new to using the Cluster Tool on Ancestry.com, I wondered what the best term was for the "Most Recent Common Ancestor" (MRCA) of the people in the coral cluster. So I asked Microsoft Copilot and learned that I could use "Cluster MRCA" or "Shared Ancestor for the Cluster". Since the former is more concise, I'll go with it.²

Using this terminology, the "Cluster MRCA" for the coral cluster is the ***Oakley-Burks*** couple (Ray Miller Oakley and his wife Kate Cameron Burks).

Moving on, the six DNA matches in Hal's magenta cluster are:

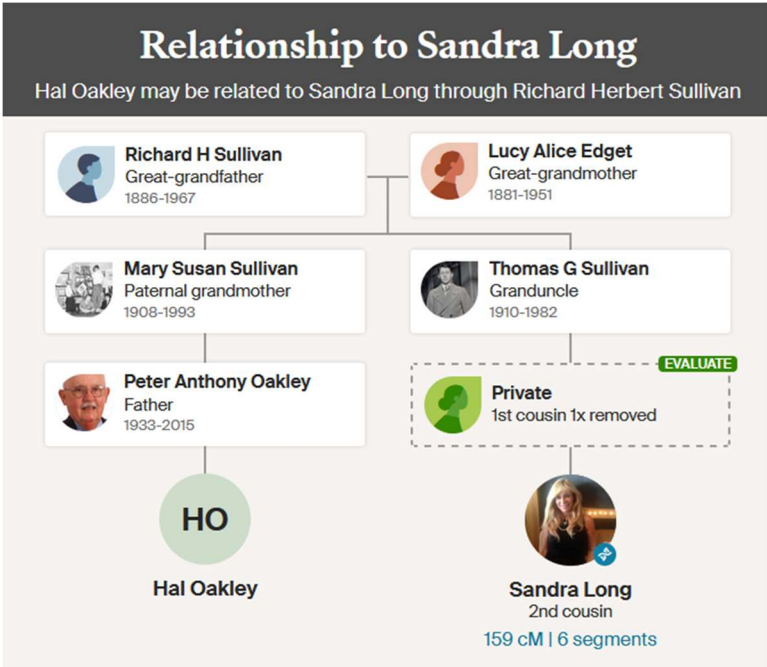
- Sullivan Oakley
- Ann Flanigan
- Sandra Long
- Brooke Graham
- ***B.F.***
- Dave Waller

² From Copilot: "Cluster MRCA" or "Shared Ancestor for the Cluster" – This refers to the most recent individual (or couple) from whom all or most members of the cluster are descended. In practice, this could be:

- A specific ancestor (e.g., great-great-grandfather John Smith)
- A couple (e.g., John Smith and Mary Jones)
- Or a hypothetical ancestor if the exact identity isn't yet known

Ann Flanigan is Hal’s first-cousin once-removed. She is one of Tom Sullivan’s daughters, and Tom Sullivan was the older brother of Hal’s paternal grandmother, Mary Susan Sullivan (1908-1993). Tom Sullivan and Mary Susan Sullivan were children of Richard Herbert Sullivan (1886-1967) and his wife Lucy Alice Edget (1881-1951).

Hal and Sandra Long are second-cousins. They both are descended from the **Sullivan-Edget** couple. Here is a chart showing how they are related:



Brooke Graham also is descended from the **Sullivan-Edget** couple; she and Hal are second-cousins once-removed.

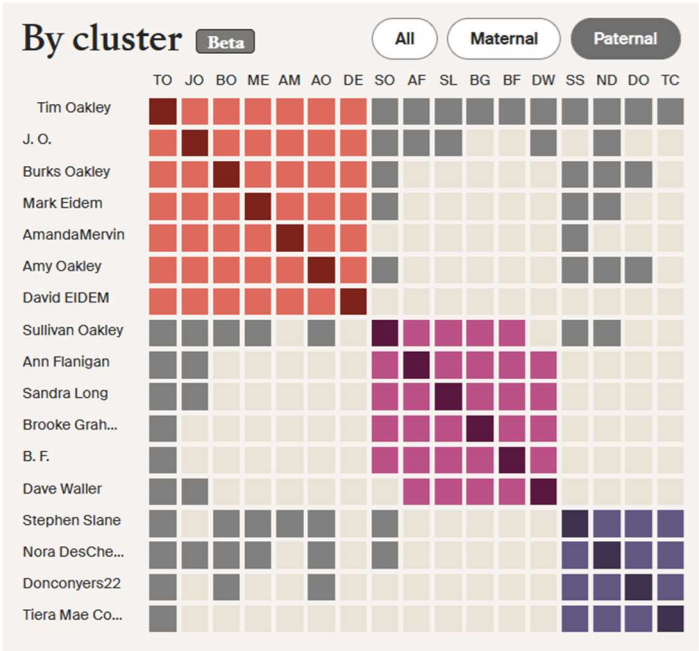
I don’t recognize **B.F.** and Dave Waller, but perhaps Hal knows who they are.

I conclude that Hal’s DNA matches in the magenta cluster are all descended from Richard Herbert Sullivan (1886-1967) and his wife Lucy Alice Edget (1881-1951). So the “Cluster MRCA” for the magenta cluster is the **Sullivan-Edget** couple.

Note that Sullivan Oakley is a second-great granddaughter of the **Oakley-Burks** couple and she also is a second-great granddaughter of the **Sullivan-Edget** couple. Sullivan was placed in the **Sullivan-Edget** (magenta) cluster. I was surprised by this, since I believe that she could just as easily have been placed in the **Oakley-Burks** (coral) cluster.

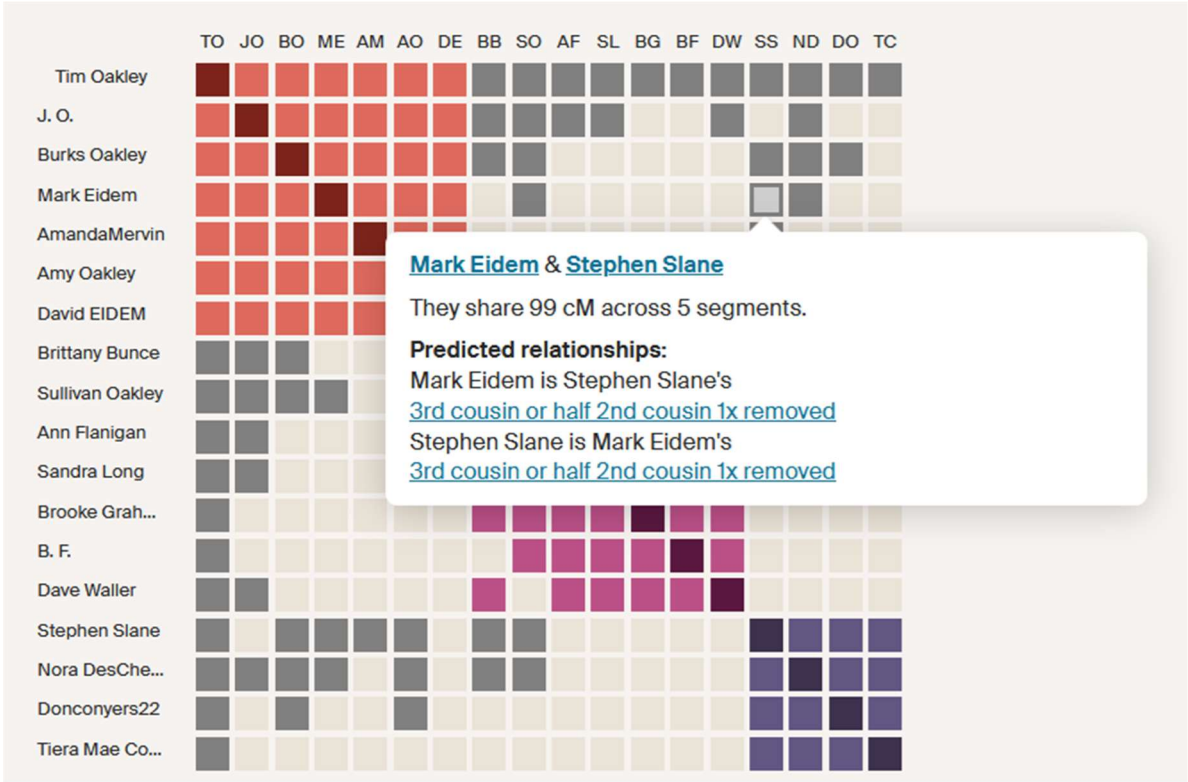
Hal’s deep-purple cluster contains his DNA relatives on the **Burks** side of his family - Stephen Slane, Nora DesChene, Don Conyers, Tiera May Conyers (Don's daughter). They all are descended from James Alfred Burks (1831-1900) and his wife Mary Jane Cameron Crawford (1837-1902), so the **Burks-Crawford** couple is the “Cluster MRCA” for the deep-purple cluster.

Let me now go back and revisit Hal’s three paternal clusters:

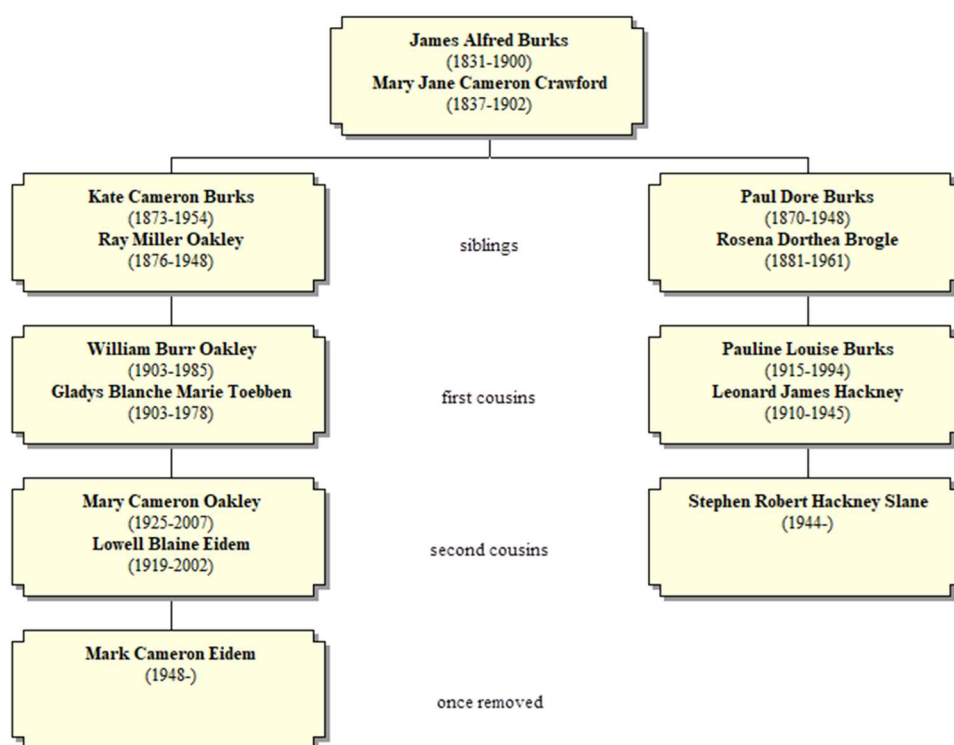


In this cluster map, there are a number of gray-colored cells. Recall that a gray cell means that the two people who intersect on that cell (horizontal row, vertical column) have a DNA match at is at least 20 cM in size, but the two individuals belong to different clusters.

While looking at Hal’s paternal clusters, I hovered the mouse pointer over the cell where Mark Eidem (row) intersects Stephen Slane (SS column):

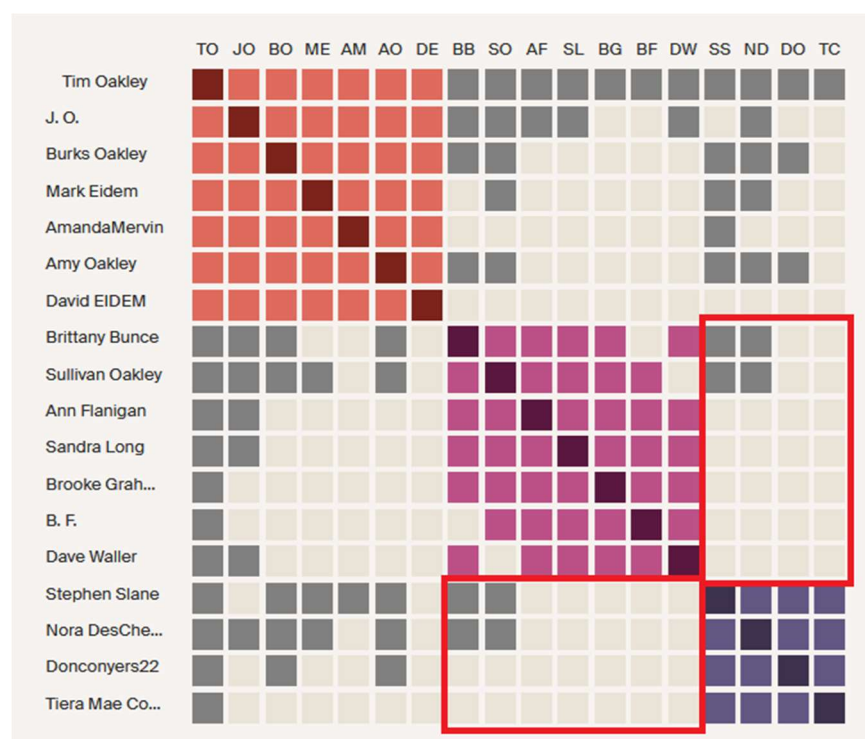


Mark and Stephen share 99 cM of DNA. And Mark is in the coral cluster, while Stephen is in the deep-purple cluster. The reason that they share DNA is that they both are descended from the **Burks-Crawford** couple, as shown in the following relationship chart:



Mark and Stephen are both descended from the **Burks-Crawford** couple at the top of the chart. Mark is descended from the **Oakley-Burks** couple at the upper-left of the chart. Since each of these couples are the “Cluster MRCA” of a different cluster, Mark and Stephen ended up in different clusters. [Mark’s closest “Cluster MRCA” is the **Oakley-Burks** couple.]

I also looked at the empty (un-colored) cells:

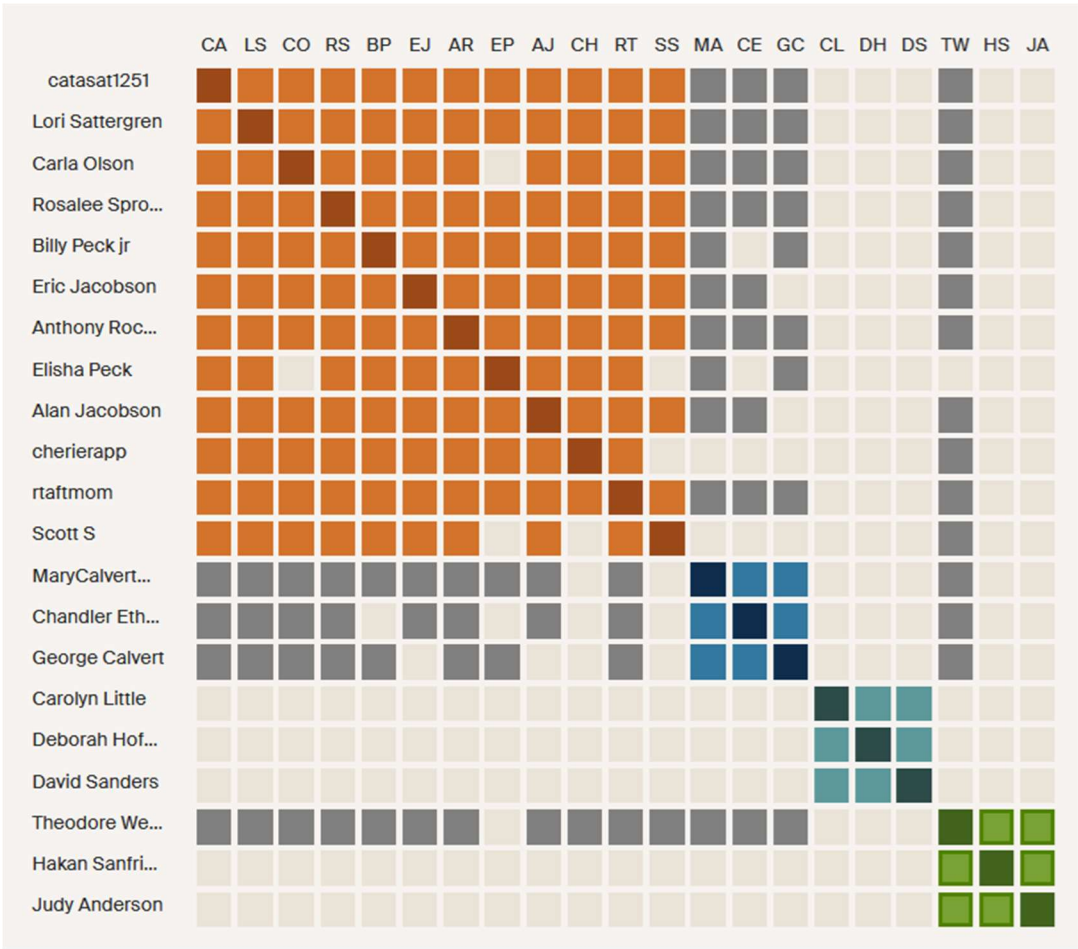


Oh my! Since I started writing this narrative a few days ago, Brittany Bunce has been added to Hal’s cluster map – she is Hal’s first-cousin-once removed. Like Sullivan Oakley, I believe that she could have been placed in the coral cluster instead of the magenta cluster.

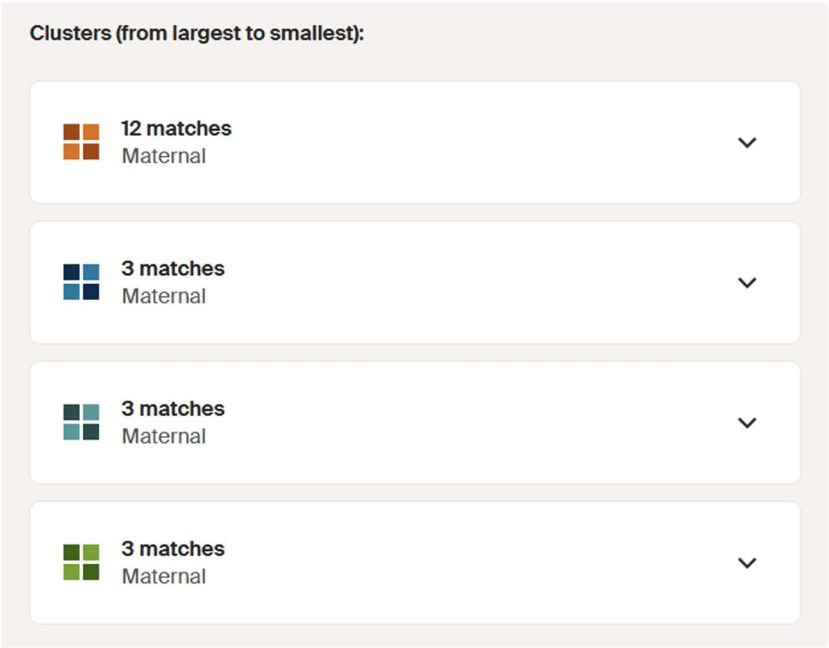
But the point I wanted to make was that the people in the deep-purple cluster are related to Hal through the **Burks** family, while most of the people in the magenta cluster are related to Hal through the **Sullivan** family. Since the **Burks** family is on Hal’s father’s paternal side, while the **Sullivan** family is on Hal’s father’s

maternal side, the people in these two groups should not be related to each other. But having Brittany and Sullivan in the magenta cluster adds a wrinkle to this.

Now let me continue on and look at Hal’s four maternal clusters:



Hal’s largest maternal cluster is colored burnt-orange. At this point, I should add that associated with the cluster view is a panel that lets the user view all the members of each cluster. Here are Hal’s four maternal clusters:

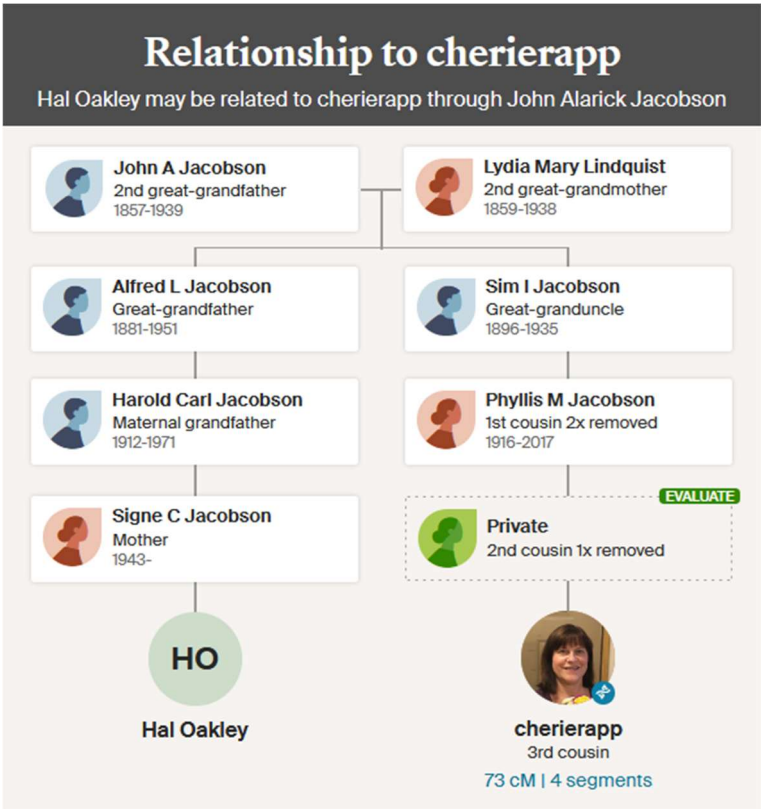


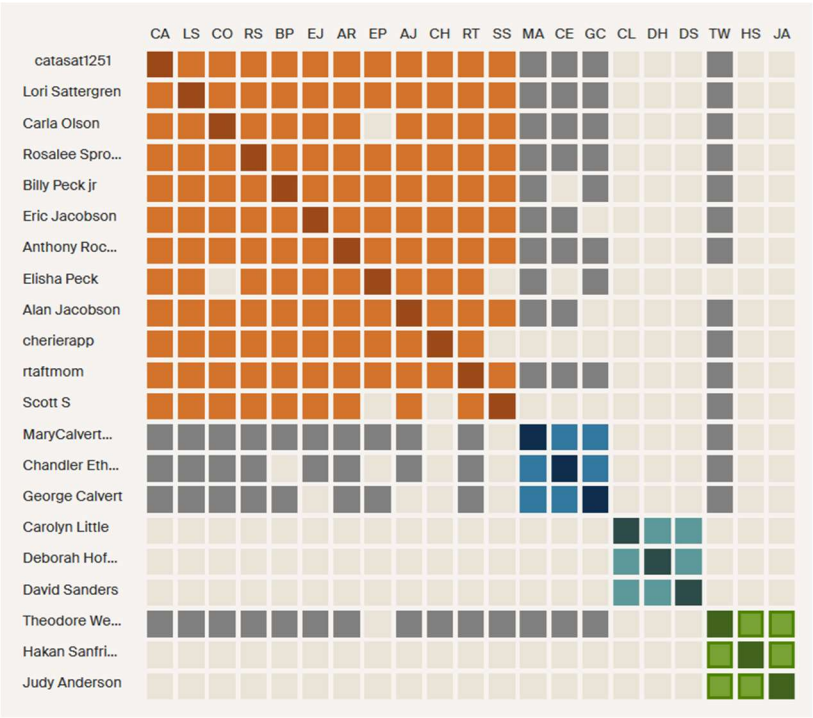
Clicking on the carat at the right side of the panel opens that cluster – here is the first part of Hal’s burnt-orange cluster:

12 matches			Maternal					
			catasat1251			2nd cousin or half 1st cousin 1x removed Maternal side 228 cM 3% shared DNA		
						 Public linked tree 1,142 people  Common ancestor		
			Lori Sattergren			2nd cousin or half 2nd cousin Maternal side 189 cM 3% shared DNA		
						 Public linked tree 8 people  Common ancestor		
			Carla Olson			half 2nd cousin or 2nd cousin 1x removed Maternal side 160 cM 2% shared DNA		
						 Unlinked tree		

Note that the first two members of this cluster have “Common ancestors”, so it was relatively straightforward to figure out how all the members of this group are related to each other. It appears that the “Cluster MRCA” for the burnt-orange cluster is John Alarick Jacobson (1857-1939) and his wife Lydia Mary Lindquist (1859-1938).

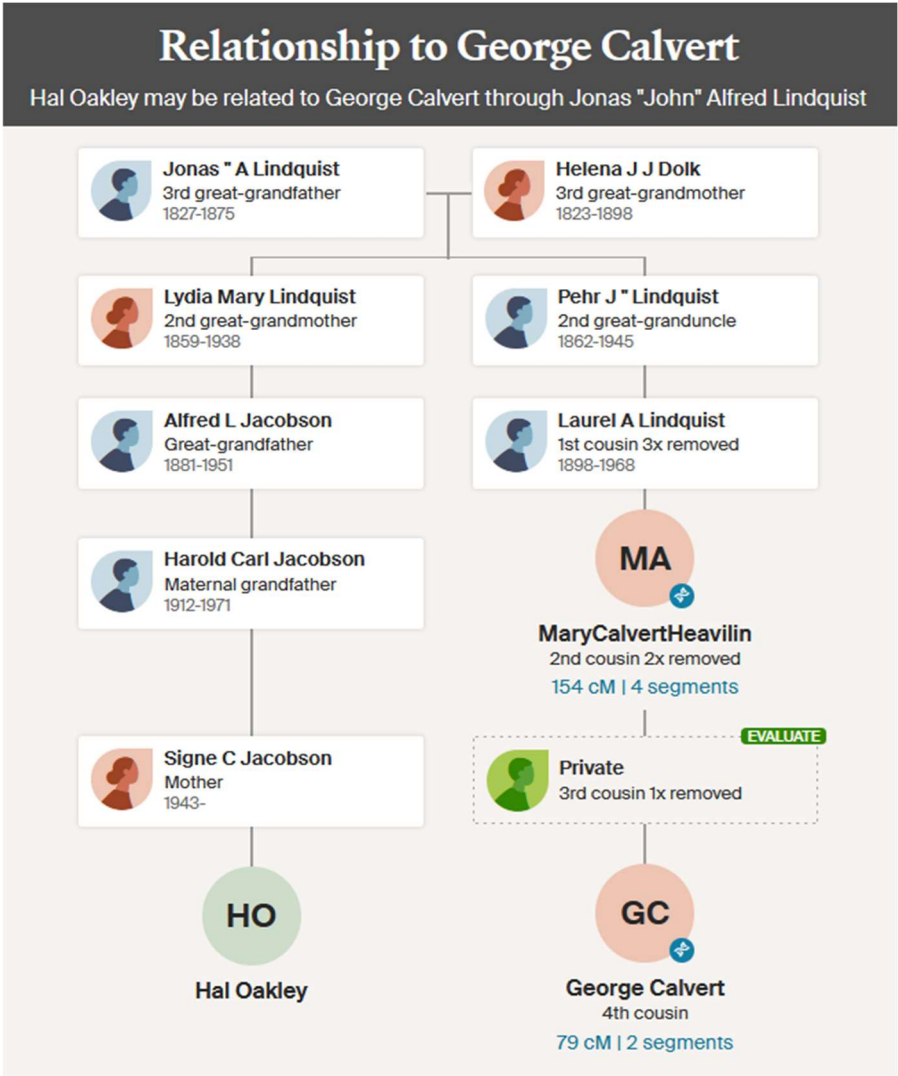
One of the twelve members of the burnt-orange cluster is Cherie Rapp – and here is a chart showing how Hal and Cherie are related:





Hal’s blue cluster contains three people: Mary Calvert Heavilin, Chandler Etheridge, and George Calvert. They all are descended from Jonas “John” Alfred Lindquist (1827-1875) and his wife Helena Johanna Johansdotter Dolk (1823-1898).

Here is a chart showing how George Calvert and Hal are related:



Here is Hal’s turquoise cluster:

	CL	DH	DS
Carolyn Little			
Deborah Hof...			
David Sanders			

This cluster contains three individuals: Carolyn Little, Deborah Hofmeister, and David Sanders. Here is more information about the three of them:

**3 matches**

Maternal

**Carolyn Little**
Managed by Carolyn Little

half 2nd cousin or 2nd cousin 1x removed
Maternal side
153 cM | 2% shared DNA

 [Public linked tree](#)
2,428 people
 Common ancestor

 The DNA match appears to be with Carolyn's mother, who has the initials C.L. Hal know...

**Deborah Hofmeister**

half 2nd cousin 1x removed
Maternal side
93 cM | 1% shared DNA

 [Public linked tree](#)
2,013 people
 Common ancestor

 Deborah is descended from Christopher Uhland and Carolina Seitter on Hal's Fisher-U...

**David Sanders**

3rd cousin or half 2nd cousin 1x removed
Maternal side
68 cM | < 1% shared DNA

 [Public linked tree](#)
35,349 people
 Common ancestor

 David is descended from Christopher Uhland and Carolina Seitter on Hal's Fisher-Uhla...

According to my notes, all three of them are descended from Christopher Uhland (1830-1896) and his wife Carolina Regina Seitter (1838-1917). This couple were Hal’s third-great grandparents:

How are Hal Oakley and David Sanders related?

Common Ancestors 

According to Ancestry member trees, these are the common ancestors that connect Hal Oakley and David Sanders. View a common ancestor to see the relationship path that connects them.

Hal Oakley and David Sanders could be 3rd cousin 1x removed through:

**Christopher Ferdinand Uhland**
3rd great-grandfather
1830–1896
[View Relationship](#)

**Carolina Regina Seitter**
3rd great-grandmother
1838–1917
[View Relationship](#)

Here is a chart showing how Hal and David Sanders are related:



I conclude that the “Cluster MRCA” for the turquoise cluster is the *Uhland-Seitter* couple.

Hal’s fourth maternal cluster is colored green, and it contains three individuals: Theodore Wells, Håkan Sanfridsson, and Judy Anderson. Here is some information about them:

3 matches		
Maternal		
	Theodore Wells	2nd cousin Maternal side 304 cM 4% shared DNA
	Hakan Sanfridsson	half 2nd cousin or 2nd cousin 1x removed Maternal side 144 cM 2% shared DNA
	Judy Anderson	half 2nd cousin 1x removed or 2nd cousin 2x removed Maternal side 92 cM 1% shared DNA

Hal and Theodore Wells are both descended from Alfred Lawrence Jacobson (1881-1951) and his wife Hulda Matilda Karlson (1883-1941):

How are Hal Oakley and Theodore Wells related?

Common Ancestors

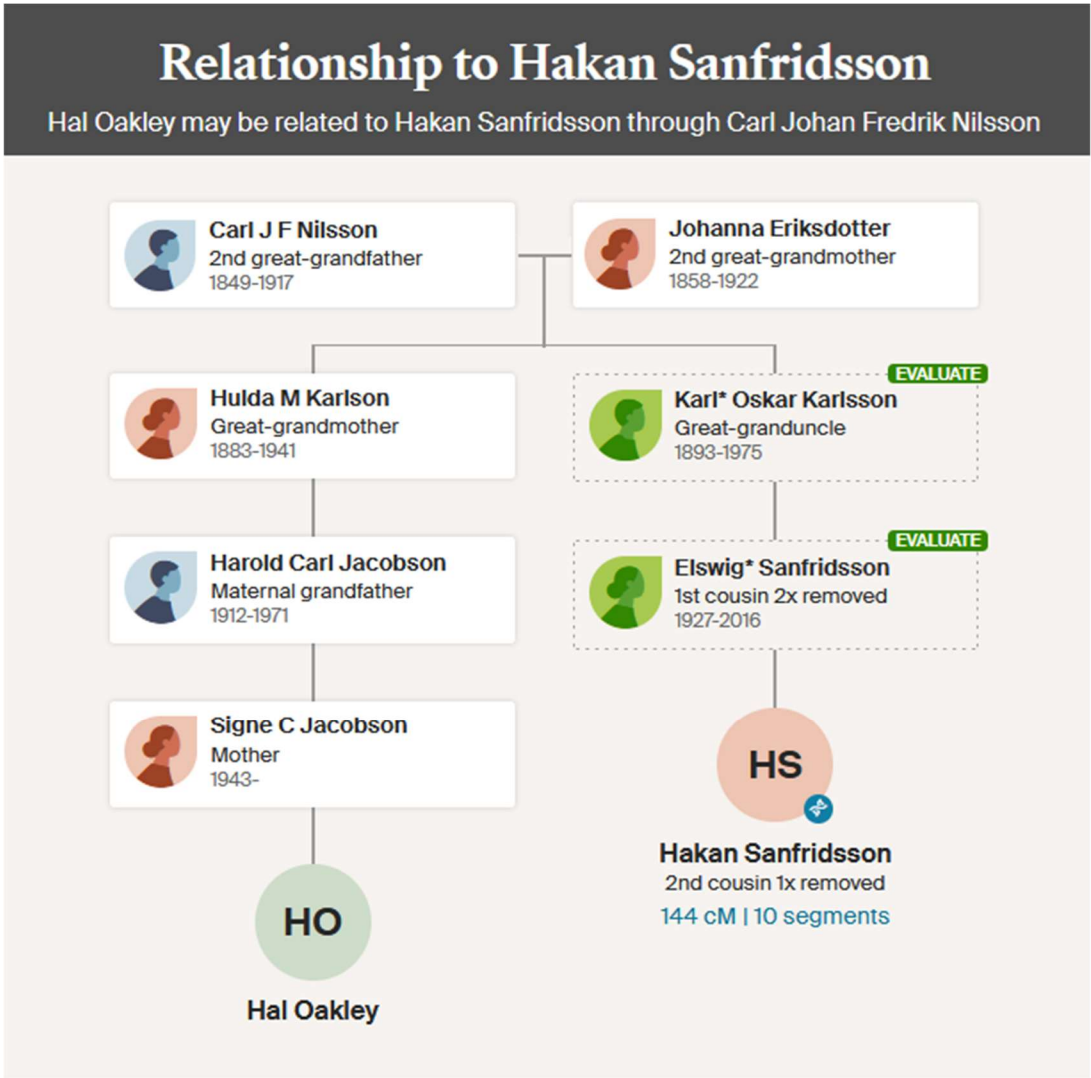
According to Ancestry member trees, these are the common ancestors that connect Hal Oakley and Theodore Wells. View a common ancestor to see the relationship path that connects them.

Hal Oakley and Theodore Wells could be 2nd cousin through:

**Alfred Lawrence Jacobson**
Great-grandfather
1881-1951
[View Relationship](#)

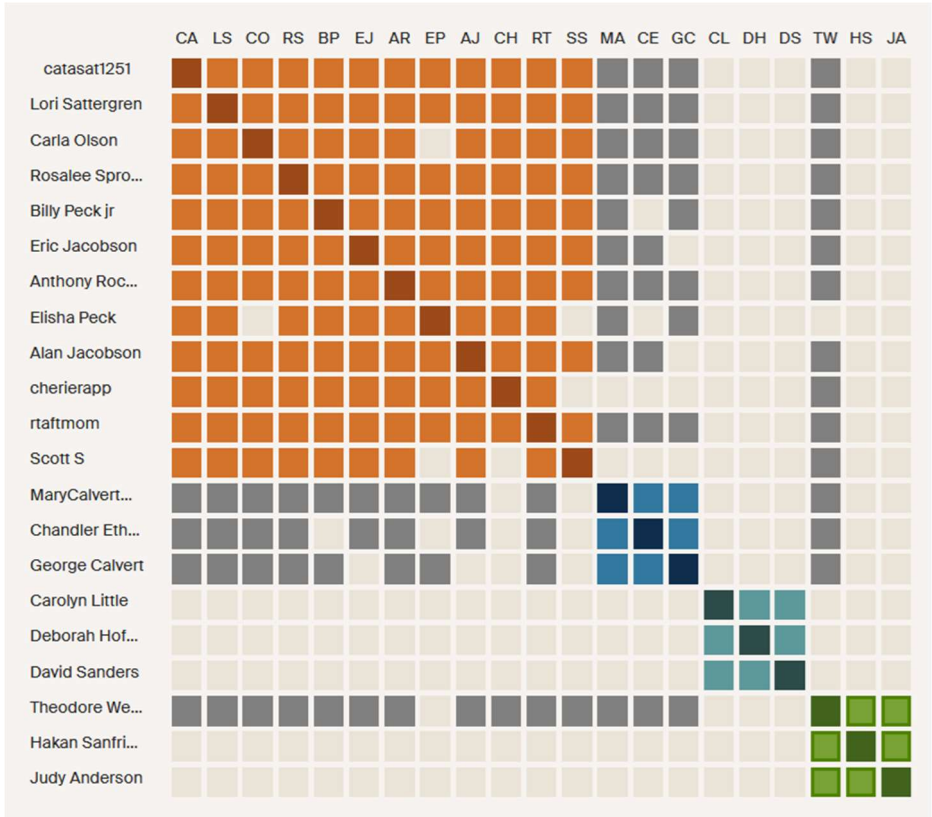
**Hulda Matilda Karlson**
Great-grandmother
1883-1941
[View Relationship](#)

But Hal and Håkan are both descended from Hulda’s parents, as shown in the following relationship chart:



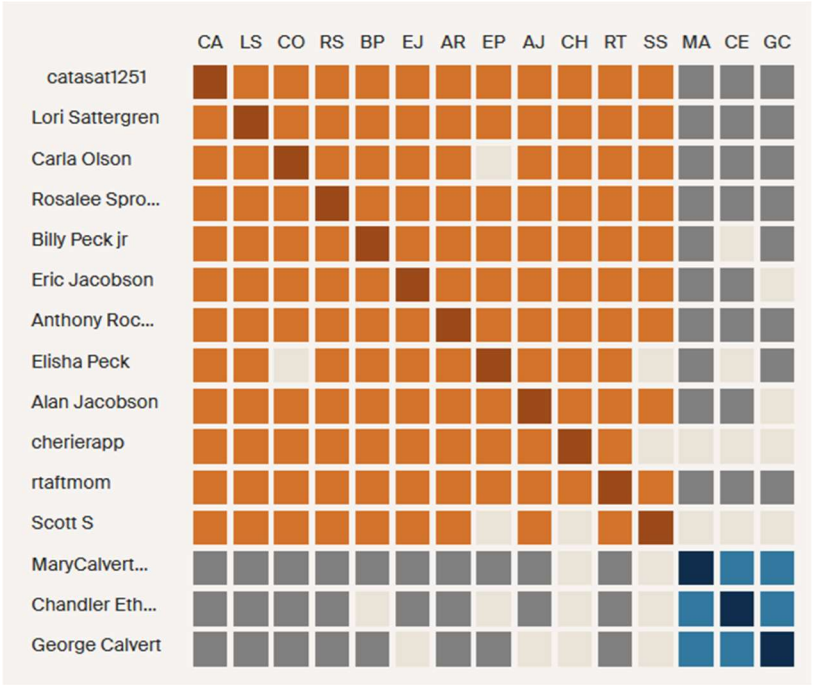
I conclude that “Cluster MRCA” for the green cluster is Carl Johan Fredrik Nilsson (1849-1917) and his wife Johanna Maria Erikdotter (1858-1922).

Let me now go back and look again at all four of Hal’s maternal clusters:



I now want to focus on the gray cells. Recall that a gray cell indicates that the two people associated with that cell (row, column) have a DNA match that is at least 20 cM in size, but that the two people are in different clusters.

I'll begin with Hal's burnt-orange and blue clusters:

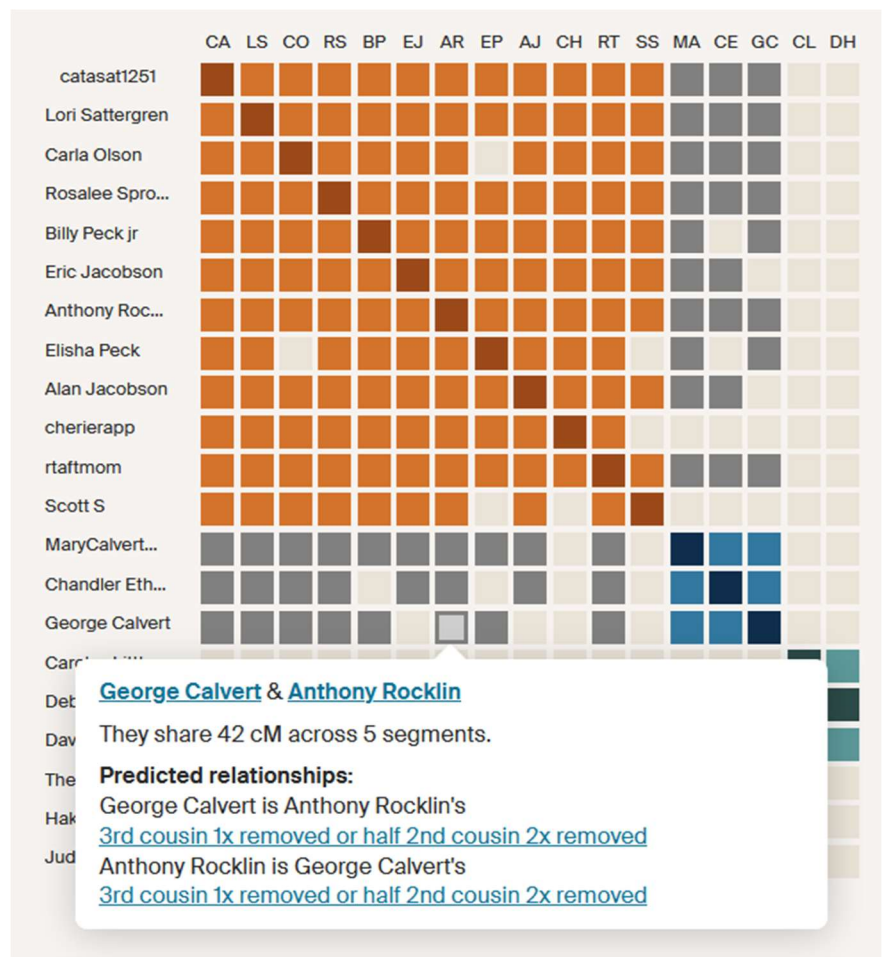


Note how many gray-colored cells there are. What accounts for this? Well, the burnt-orange cluster has descendants of John Alarick Jacobson (1857-1939) and his wife Lydia Mary Lindquist (1859-1938). The blue cluster has descendants of Jonas “John” Alfred Lindquist (1827-1875) and his wife Helena Johanna Johansdotter Dolk (1823-1898).

Of course, the **Lindquist-Dolk** couple were the parents of Lydia Mary Lindquist. So it stands to reason that descendants of Lydia Mary Lindquist (burnt-orange cluster) are related to the descendants of the **Lindquist-Dolk** couple (blue cluster). The only question is whether or not an individual from one cluster has a DNA match with an individual in the other cluster that is greater than 20 cM.

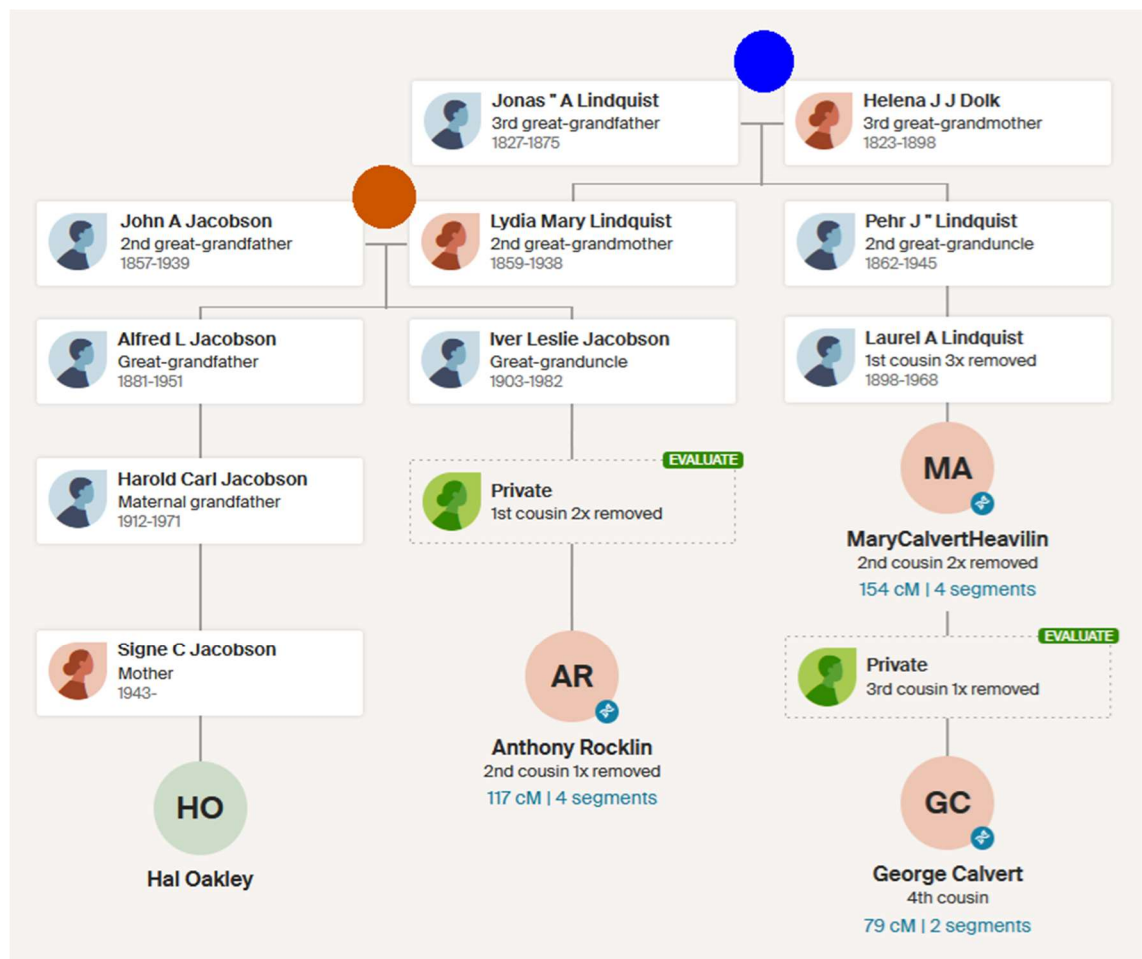
And from all the gray cells, there are a lot of matches of this size.

Let’s now look at one of the gray cells:



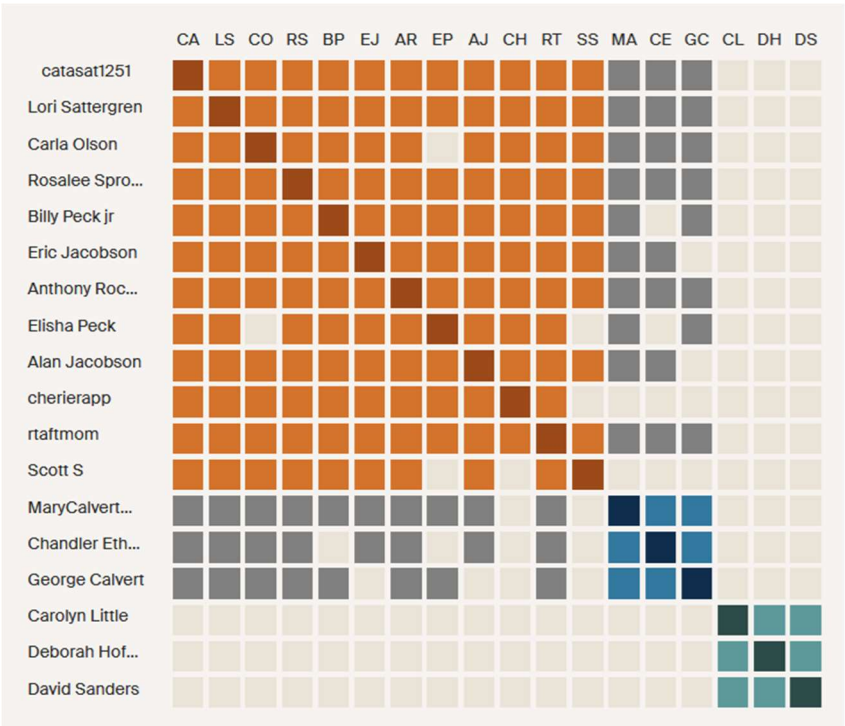
This particular cell shows where George Calvert (horizontal row) intersects Anthony Rocklin (AR – vertical column). George is in the blue cluster and Anthony is in the burnt-orange cluster. They have a 42 cM DNA match.

Here is a chart showing how Hal, George, and Anthony are related:



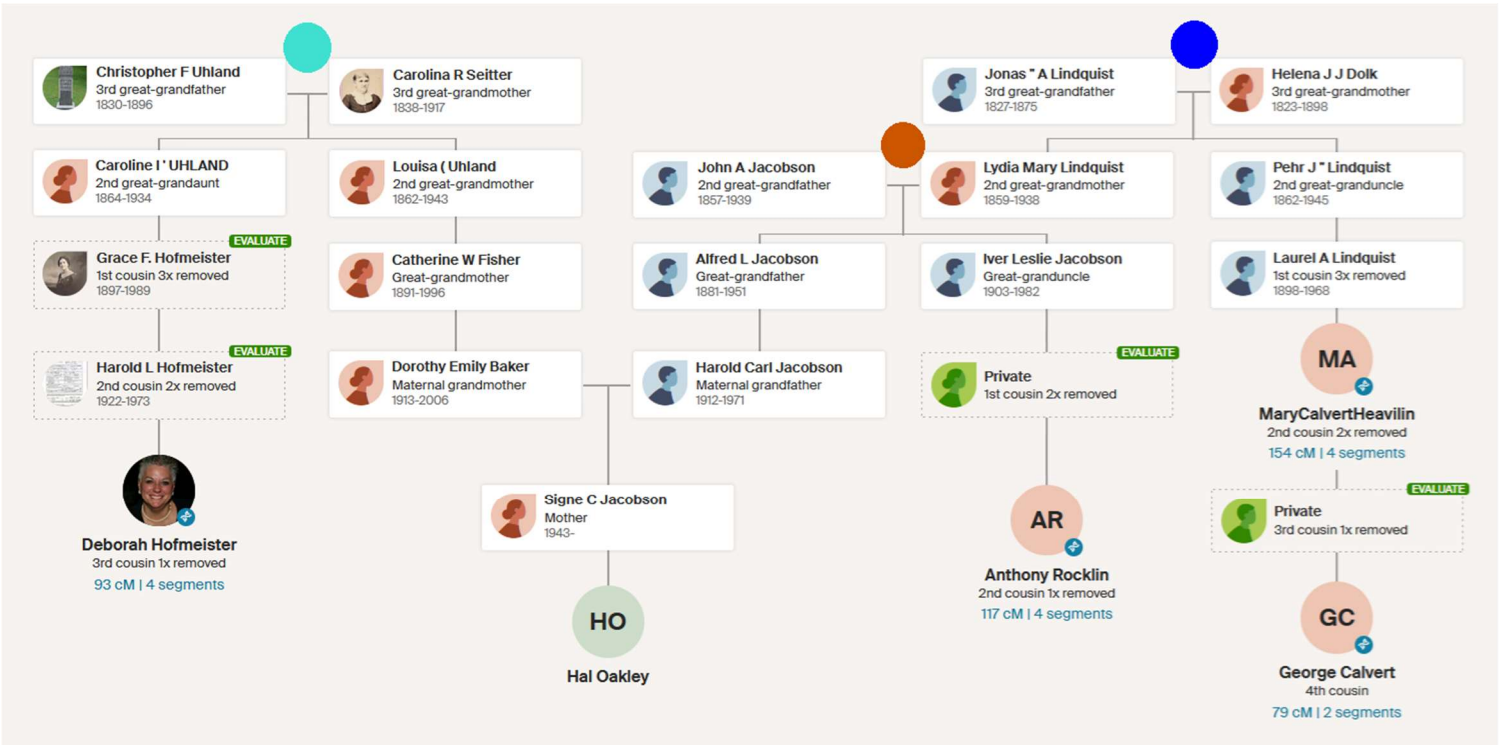
For George and Hal, their most recent common ancestors (MRCA) are the **Lindquist-Dolk** couple in the upper-right of the chart. For Anthony and Hal, their MRCA are the **Jacobson-Lindquist** couple at the upper-left. So George was placed into the blue cluster, while Anthony was placed into the burnt-orange cluster. But because George and Anthony are both descended from the **Lindquist-Dolk** couple, they have a DNA match. Since they are in different clusters, their intersecting cell is shaded gray in the overall cluster map.

The picture changes considerably when I add in Hal’s third maternal cluster:



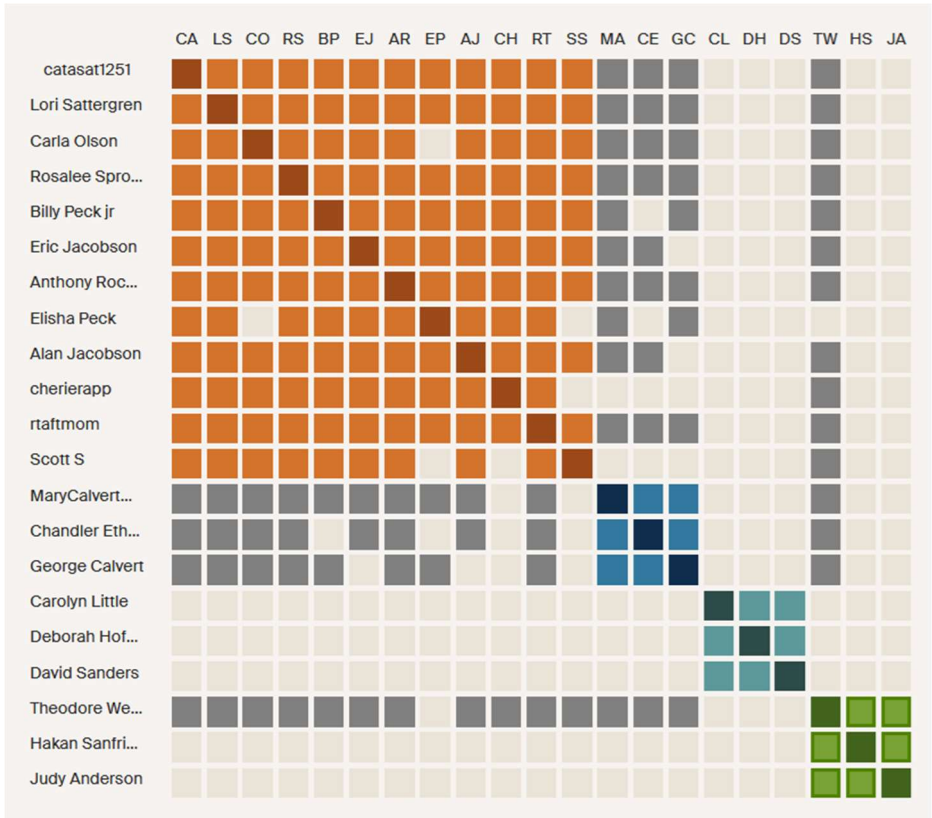
There aren’t any gray matches shared by the people in the turquoise cluster with the people in the first two maternal clusters. Why is this?

The turquoise cluster consists of people who are descended from Christopher Uhland (1830-1896) and his wife Carolina Regina Seitter (1838-1917). Let me add Deborah Hofmeister (from the turquoise cluster) to the previous relationship chart.



Since the people in the turquoise cluster are descended from the ***Uhland-Seitter*** couple, they have absolutely no ancestors in common with the descendants of the ***Lindquist-Dolk*** couple or the ***Jacobson-Lindquist*** couple. The only way that these ancestral lines connect is through Hal’s mother, Signe C. Jacobson.

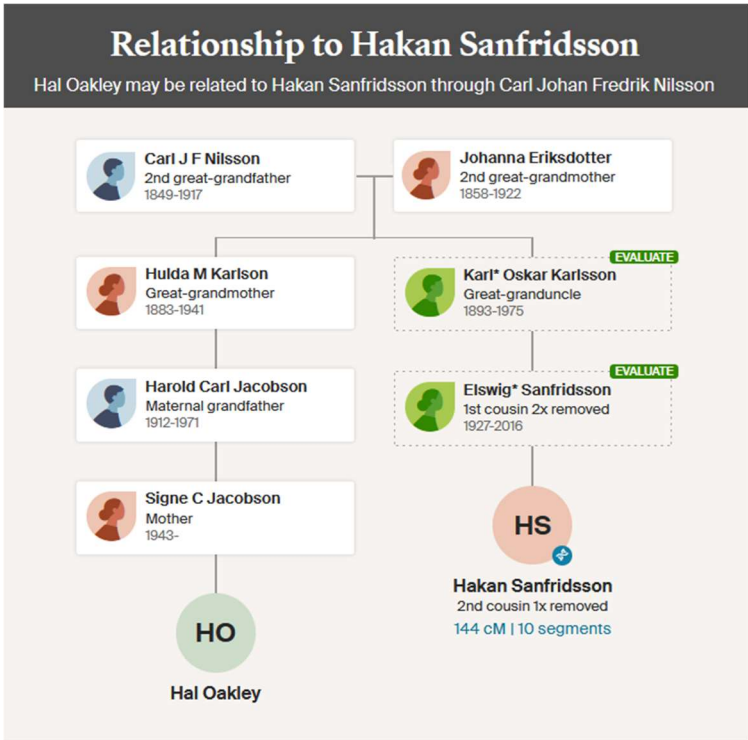
I’ll now look at the fourth maternal cluster:



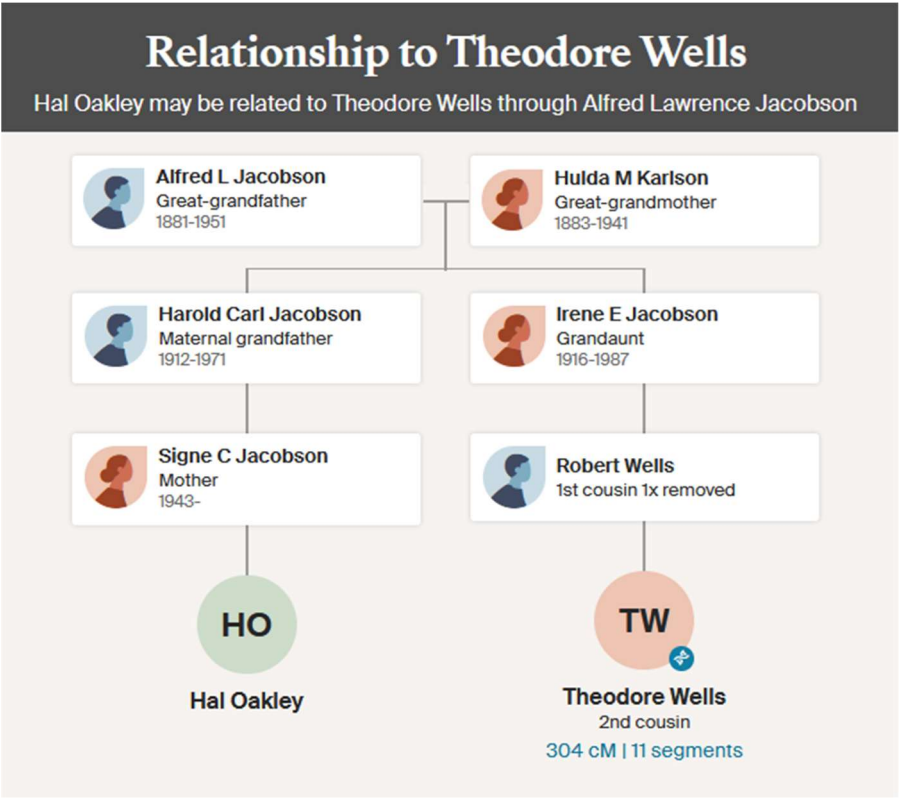
At first glance, this one is strange, in that Theodore Wells has a large number of DNA matches with people in the burnt-orange and blue groups. But the other two don’t.

I guess I need another few charts here.

Here is a chart showing how Hal and Håkan are related:



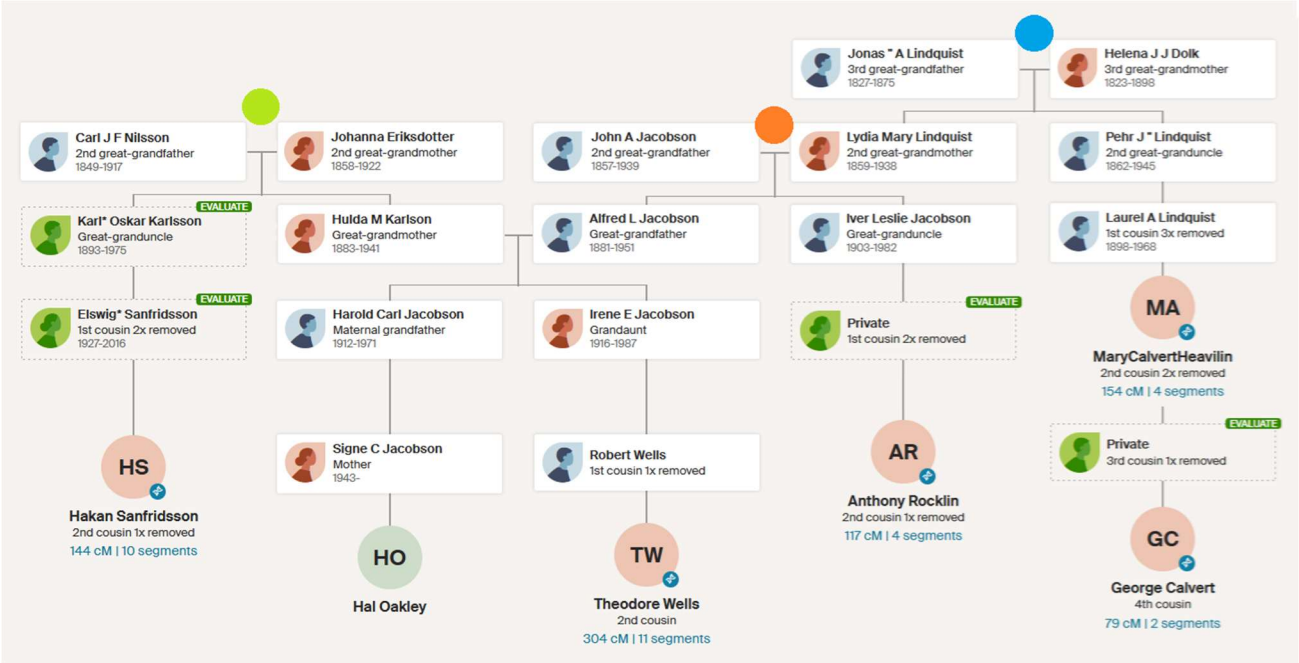
And here is a chart showing how Hal and Theodore are related:



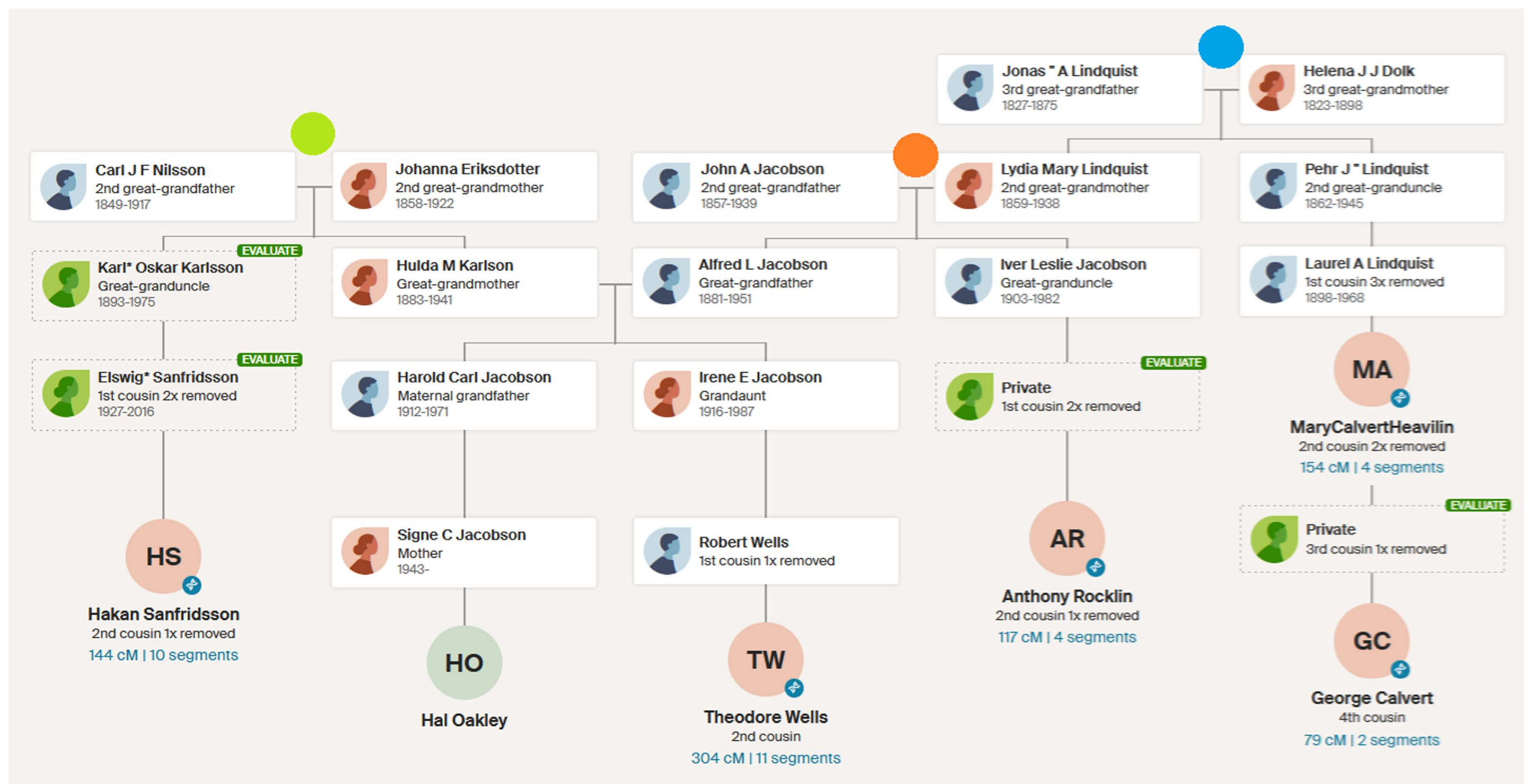
Theodore Wells is descended from Hulda Karlson, and Håkan is descended from Hulda’s parents. So in this way, Theodore and Håkan both are in the green cluster.

But Theodore Wells is also descended from Alfred L. Jacobson, who was a son of the Jacobson-Lindquist couple who were the “Cluster MRCA” of the burnt-orange cluster. And, of course, Lydia Mary Lindquist was a daughter of the *Lindquist-Dolk* couple, who were the “Cluster MRCA” of the blue cluster.

Here is a chart that includes Håkan and Theodore from the green cluster, Anthony Rocklin from the burnt-orange cluster, and George Calvert from the blue cluster:



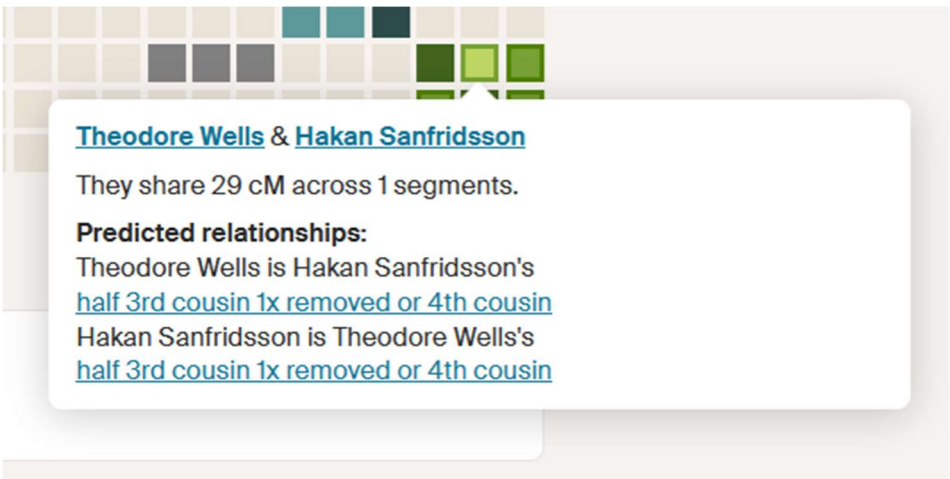
This chart is unreadable at this magnification, so I’ll show it in landscape view on the next page:



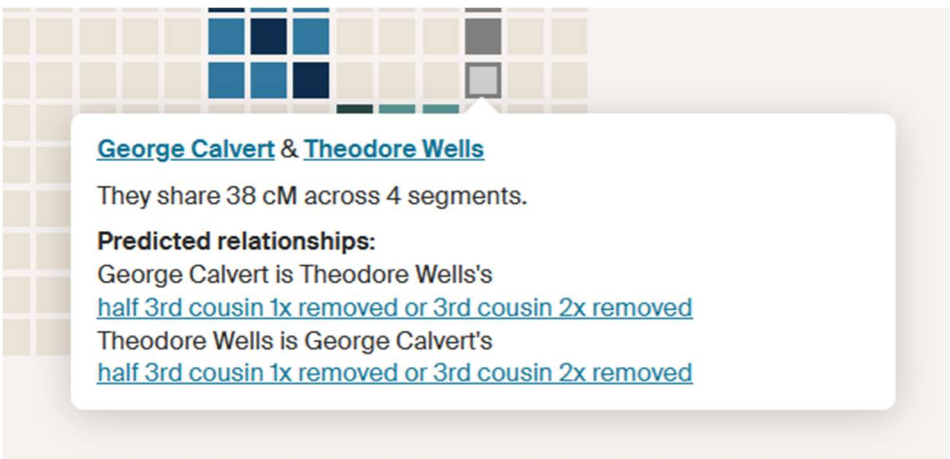
This chart shows that Håkan (in the lower-left) will not have any DNA shared with Anthony Rocklin or George Calvert (in the lower-right). The chart shows how Theodore was placed into the green cluster.

Note that Theodore Wells (in the lower-center) has ancestral lines going back to the “Cluster MRNA” in the green, burnt-orange, and blue clusters. Similarly, Hal has ancestral lines going back to the same three “Cluster MRNA” couples.

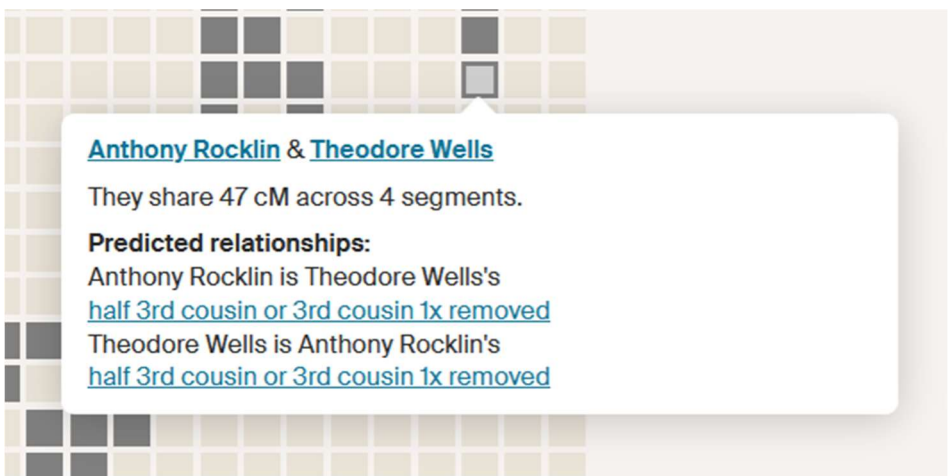
Theodore Wells is in the green cluster, and of course, he has a DNA match with Håkan Sanfridsson, who is also in the green cluster:



Theodore Wells has a DNA match with George Calvert, who is in the blue cluster:



And Theodore Wells has a DNA match with Anthony Rocklin, who is in the burnt-orange cluster:



Summary:

In this narrative, I showed how I used the new Cluster Tool on the Ancestry.com website to analyze my cousin Hal Oakley's DNA clusters.

Hal has a total of seven clusters – three on his paternal side and four on his maternal side. There are thirty-eight people in these clusters, and Hal's DNA matches with all of them are in the range of 65 cM to 1300 cM.

Hal's paternal clusters go back to:

- Ray Miller Oakley and his wife Kate Cameron Burks
- Richard Herbert Sullivan and his wife Lucy Alice Edget
- James Alfred Burks and his wife Mary Jane Cameron Crawford

Hal's maternal clusters go back to:

- John Alarick Jacobson and his wife Lydia Mary Lindquist
- Jonas "John" Alfred Lindquist and his wife Helena Johanna Johansdotter Dolk
- Christopher Uhland and his wife Carolina Regina Seitter
- Carl Johan Fredrik Nilsson and his wife Johanna Maria Eriksdotter

Within Hal's paternal clusters, some individuals in one cluster have DNA matches with individuals in one or more other cluster. Ditto for Hal's maternal clusters. I went into detail to show how these matches come about.

Random musings about the new Cluster Tool:

There is a lot going on in these cluster maps. Right now, I'm content to be able to examine the cluster maps and understand the different components. But I haven't used this new tool to assist with actual genetic genealogy – that is, I haven't discovered any new family relationships by using this tool (so far).

If someone doesn't have a family tree, and she isn't using her maiden name, then I have a very difficult time placing her into a family tree. I certainly know which branch of the tree she is in, but I knew that before from examining all the "Shared DNA Matches".

I know that Ancestry.com will be coming out with a "custom" button for examining the cluster maps – no idea what that will add.

And since the people in the cluster maps have to have a 65 cM or larger DNA match with the primary person, this approach only includes close relatives going back to the level of a third-cousin or so. The 65 cM "floor" really restricts the DNA matches who appear in these cluster maps.

I'll keep plugging along with this, and maybe there will be an "aha" moment.